INTERNSHIP REPORT

On

Green Banking Practices and Its Effects: A Study on Selected Commercial Bank Branches Located In Dinajpur and Nilphamari City.



This Report is Submitted to the Department of Marketing, Faculty of Post Graduate, Hajee Mohammad Danesh Science and Technology University for the Fulfillment of Degree of Master of Business Administration.

(MBA Program- 2016)

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HAJEE MOHAMMAD DANESH SCIENCE AND TECHNOLOGY UNIVERSITY, DINAJPUR.

June-2016

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HAJEE MOHAMMAD DANESH SCIENCE AND TECHNOLOGY UNIVERSITY, DINAJPUR.

Internship Report

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MASTER OF BUSINESS ADMINISTRATION (MBA)

(This Internship Report has been prepared for submission into the Department of Marketing, Hajee Mohammad Danesh Science and Technology University, Dinajpur, as a partial requirement for fulfillment of MBA Degree in Marketing.)

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Internship Report

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June- 2016

Dedicated to My Beloved Parents and my Honorable Teachers.

Letter of Transmittal

June, 2016

To

Md. Jamal Uddin

Assistant Professor

Department of Marketing

Faculty of Business Studies,

Hajee Mohammad Danesh Science and Technology University, Dinajpur-5200

Subject: Submission of Internship Report on "Green Banking Practices and its Effects: A study on selected commercial Bank Branches Located In Dinajpur and Nilphamari City".

Dear Sir,

This a great pleasure to submit my internship report on "Green Banking Practices and its Effects: A study on selected commercial Bank Branches Located In Dinajpur and Nilphamari City", which is a part of MBA program. To you for your kind consideration, I made sincere effort to study related documents, materials, observe operations, examine related records, and collect primary data regarding attitude for preparation the report.

Within the time, I have tried my best to complete the pertinent information as comprehensive as possible.

Therefore, I will be very much glad to hear from you for further clarification.

Sincerely yours,

Prosenjit Roy

Student Id-1505093
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Declaration

I, am **Prosenjit Roy, Student ID No. 1505093**, MBA in Marketing, Department of Marketing, submitted my internship report entitled "Green Banking Practices and its **Effects: A study on Selected Commercial Bank Branches Located In Dinajpur and Nilphamari City**" after completing my internship program. I have tried my level best to get together as much information as possible to enrich the report. I believe that it was a great experience and it has enriched both my knowledge and experience.

This report has been submitted in partial fulfillment of the requirement for the degree of Master of Business Administration (MBA) in Marketing at Hajee Mohammad Danesh Science and Technology University, Dinajpur.

Prosenjit Roy

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MBA in Marketing

Department of Marketing

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Certificate of Supervisor

I, hereby declare that the internship report entitled "Green Banking Practices and its Effects: A study on Selected Commercial Bank Branches Located In Dinajpur and Nilphamari City." is a useful record of the internship work done by Prosenjit Roy, Student ID No. 1505093, MBA in Marketing, Department of Marketing, Hajee Mohammad Danesh Science and Technology University, Dinajpur-5200. This report represents an independent and original work prepared on the basis of primary and secondary data collected and analyzed by the candidate. This report has not been accepted for any other degree and is not concurrently submitted in candidature of any other degree.

This entire work has been planned and carried out by the candidate with my supervision and guidance. In my opinion, this report is sufficient in terms of scope and quality for the award of the degree of Master of Business Administration (MBA) in Marketing from Hajee Mohammad Danesh Science and Technology University, Dinajpur.

SUPERVISOR
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Md. Jamal Uddin
Assistant Professor,
Department of Marketing,
Faculty of Business Studies,
HSTU, Dinajpur.

Certificate of Co-Supervisor

I, hereby declare that the internship report entitled "Green Banking Practices and its Effects: A study on Selected Commercial Bank Branches Located In Dinajpur and Nilphamari City." is a useful record of the internship work done by Prosenjit Roy, Student ID No. 1505093, MBA in Marketing, Department of Marketing, Hajee Mohammad Danesh Science and Technology University, Dinajpur-5200. This report represents an independent and original work prepared on the basis of primary and secondary data collected and analyzed by the candidate. This report has not been accepted for any other degree and is not concurrently submitted in candidature of any other degree.

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Acknowledgement

At first, I would like to express my gratefulness and harmony to the ALLMIGHTY the supreme authority of the Universe, without whom we would be nothing. Next I would like to express my kindness to my Beloved Parent whose continuous inspiration enrages me to make a right move in my life.

I am grateful towards some respected persons for their advice, suggestions, direction and cooperation which have enabled me to have an experienced in the dynamic environment such like in banking sector.

I would like to thank my honorable supervisor **Md. Jamal Uddin,** Assistant Professor, Department of Marketing, Faculty of Business Studies, Hajee Mohammad Danesh Science and Technology University, Dinajpur, whose help, suggestions and cooperations, in preparing the report.

I would like to thank my honorable co-supervisor **Md. Abdur Rouf,** Lecturer, Department of Marketing, Faculty of Business Studies, Hajee Mohammad Danesh Science and Technology University, Dinajpur, whose help, suggestion and co-operation in preparing the report.

I would like to thank from the deep of my heart to those people who are related with making of this report and make it a success.

I would like to express my indebtedness to my report all the teachers, Department of Marketing, Faculty of Business Studies, Hajee Mohammad Danesh Science and Technology University, Dinajpur, for helping me and giving assistance in preparing the report.

Prosenjit Roy

June- 2016

Acronyms and Abbreviation

ATM : Automated Teller Machine

BB : Bangladesh Bank

BACPS : Bangladesh Automated Cheque Processing System

BEFTN : Bangladesh Electronic Fund Transfer Network

DBBL : Dutch Bangla Bank Ltd

ETP : Effluent Treatment Plant

EDD : Environmental Due Diligence

EDW : Enterprise Data Warehouse

ERM : Environmental Risk Management

ERP : Enterprise Resources Planning

FCB : Foreign Commercial Banks

GHG : Green House Gas

GRI : Global Reporting Initiatives

ICT : Information and Communication Technology

L/C : Letter of Credit

LDC : Least Developed Countries

MBL : Mercantile Bank Ltd

PCB : Private Commercial Banks

SCB : State Owned Commercial Bank

SDB : Specialized development banks

SIBL : Social Islami Bank Ltd

Abstract

Banking sector plays an outstanding role in the economic development in our country. Banks make profit to give loan to entrepreneur. Some projects destroy the environment financed by bank by increasing carbon die oxide in the world. To keep the world habitable, like other sectors, banking sector also has its responsibility to protect environment. To fulfill this responsibility, the banking sector has adopted the concept of Green Banking. The concept of Green banking is comparatively a new concept. It is a paperless banking, which not only reduces the cost of banking activities but also helps in environment sustainability. It helps in reducing the use of paper, power and energy. Thus the concept of green banking is evolved in response to the global initiative to save environment. It is a kind of welfare banking for the society at large, it responses to be green in daily operations and financing to projects. The main objective of this paper is to know about the initiatives taken by the banking sector. Banking sector plays a crucial and decisive role in promoting environmentally sustainable and environment friendly investments. Banks provides green finance and helps to spreads green products and starts green marketing. Thus, encouraging environmentally responsible investments and of Green banking activities should be one of the responsibilities of the banking sector. The Green initiatives taken by Banks or a concept of Green banking means using all of the banks resources with responsibility and care, avoiding waste and giving priority to choices that take care of environment. It also means promoting environmental-friendly practices and reducing your carbon footprint from your banking activities. The reasons for going green are manifold, and the key among them are: increasing energy consumption and energy prices, growing consumer interest in environmentally-friendly goods and services, higher expectations by the public on Bank's environmental responsibilities and emerging stricter regulatory and compliance requirements of Bangladesh Bank.

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CHAPTER-1

INTRODUCTION

1.1 Prelude

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 also called as an ethical bank or a sustainable bank. They are controlled by the same authorities but with an additional agenda toward taking care of the Earth's at present, the concept "Green Banking" has become well known to all. Environment is the bigger issue for banking services. There is a high possibility of playing significant role of Green Banking in the environmental issues. Because of Green Banking practices, Banks are responsible to invest their money their project that promote environmental friendly project to save the environment from climate change, environmental damage and destruction of natural beauty. The concept of green banking was developed in the western countries. Green Banking was formally started in 2003 with a view to protecting the environment. Then the Equator Principles (EPs) were launched and were initially adopted by some leading global banks, such as Citigroup Inc, The Royal Bank of Scotland, Westpac Banking Corporation. In March 2009, Congressman Chris Van Hollen of USA introduced a Green Bank Act with the aim of establishing a green bank under the ownership of the US government. After introduce the Green Banking initial decision was to minimize the paper use in banking works because to make all kinds of papers need to cutting trees as raw materials (its minimize the green forestation) and for this reason naturally its reduce the Oxygen and increase the carbondioxide in airspace/ globe .There are two ways of green banking practices. One is inhouse green banking; another is practice by the bankers in their business area. Creating clean and hygienic banking environment, green building, reforestation, online banking, waste management, installation of solar panel on the rooftop of the bank and using high mileage vehicles, reducing sound pollution, using webcam for video conferencing instead of physical meetings, online statements, emailing documents are included in the in-house Green Banking. Financing the green projects like Bio-gas Plant, Solar/Renewable Energy Plant, Bio-fertilizer Plant, Effluent Treatment Plant (ETP), Projects having ETP etc, working on specific green projects, voluntary activities of banks are major practices by

the bankers in their business areas. Green banking that considers all the social and environmental factors is also called ethical banking. The main objective of green Banking is to ensure the use of organizational resources in favor of the environment and society. Green banking is the smart way of thinking with a vision for future sustainability of our only habitable planet earth for mankind. It evaluates all the factors before giving the loan whether the project is environment-friendly and has any implication on the future people and planet. It is broadly recognized that Bangladesh is very vulnerable to climate change. It has internationally been argued that Bangladesh, as a country, may suffer the most impacts from climate change. Though Bangladesh is a low carbon emitting country even among the developing countries likely to be one of the worst sufferers of climate change. It is experienced that climate change has already enhanced the frequency and intensity of floods, droughts and cyclones in Bangladesh, and would have negative impact on water resources, land, crop agriculture and food security, fisheries and livestock, forestry and human health as well. The Government of Bangladesh and The Bangladesh Bank has shown keen interest in it, and as such formulated guidelines in this respect, and encourages the scheduled banks to take measures to create a congenial atmosphere through 'green banking methodology'. Green banking can also reduce the need for expensive branch-banking and customer services. In Bangladesh, Green Banking is launched in 2011 by Bangladesh Bank. The Government of Bangladesh has undertaken a perspective plan (2010-2021). Green Banking is any form of banking from that the country and nation gets environmentally benefits. The banking sector can play an intermediary role between economic development and environment protection by promoting environmentally sustainable and socially responsible investment. Green banking undertakes proactive measures to protect environment and to address climate change challenges while financing along with efficient use of renewable, non-renewable, human and natural resources.

1.2 Statement of the problem

As environmental sustainability is an important issue and green banking is a step in this regard. Green banking is considered as one of the tools of ensuring sustainable development where economic activity will not have any negative impact on the environment. Our country is one of the adversely effected countries in the world because of the world carbon dioxide emission. In spite of global economic activity our own

business activity is also creating environmental pollution. Green banking as already discussed is considered as a very important tool to protect our environment from our own business activity. Through this study we will try to find out what bankers are thinking about this. The findings will help the policy makers of Bangladesh Government and Bangladesh Bank to adjust their approach to the banks of Bangladesh. Hence, there is a need to study the green banking initiative taken by the banking sectors and also to review the role of green banking in environment sustainability.

1.3 Research Question

- Q-1: What kinds of forces are influencing banks to take and to implement green banking strategy?
- Q-2: What types of Green Banking strategy are followed by the banks?
- Q-3: What factors influence consumer perception about Green Banking?

1.4 Objective of the study

I have carried out this study to find out some key issues about green banking of Bangladesh.

The study mainly aims to analysis the green banking practices in Bangladesh and its present situation and its effects. To attain the main objective, the study considers the following core and specific objectives in particularly.

1.4.1 Core Objective

The core objective of this study is to find out what factor or factors influence bankers to adopt green banking and to identify what type of green banking strategy are followed by them.

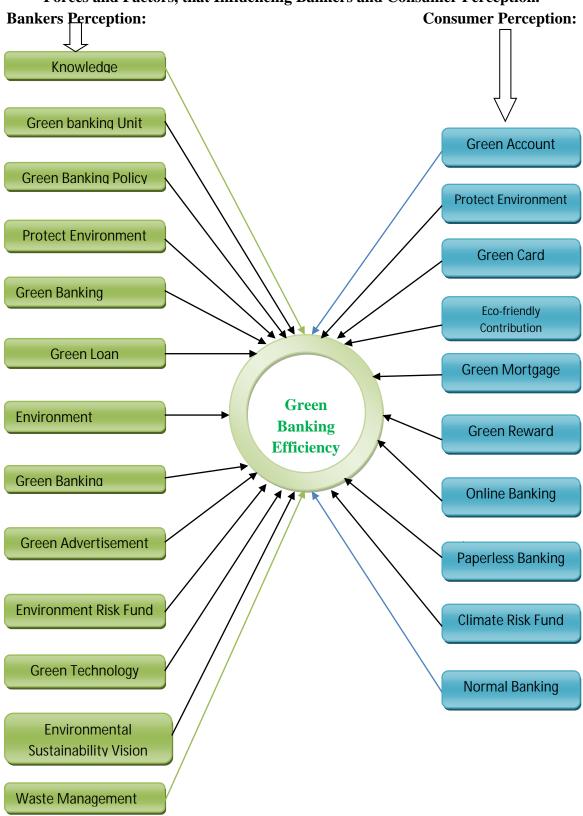
1.4.2 Specific objectives

Some specific objectives of this study are:

- a. To Identify Importance and Prospect of Green Banking.
- b. To Evaluate Present situations of Green Banking.
- c. To analyze the customer perception towards green banking practices in Bangladesh.
- d. To justify the prospects of green banking practices in Bangladesh.

1.5 Conceptual Framework

Figure 1.1
Forces and Factors, that Influencing Bankers and Consumer Perception.

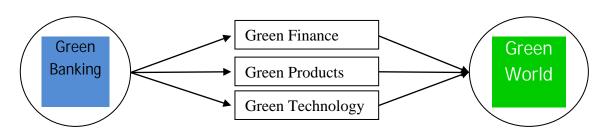


Source: Developed by the Researcher

1.6 Definition of Key Terms

Green Banking mainly a combination of three major terms, green products, green technology and green finance by a bank. Bellow we showed it by a graphical design.

Figure 1.2 Green Banking at a Glance.



Source: Developed by the Researcher

1.6.1 Green Banking

The term Green Banking means promoting environment friendly practices for sustainable growth and reduces the carbon footprint from the banking industry. Green banking thus involves a two interrelated approach. Firstly, green banking focuses on the green transformation of internal operations of all banks. It means all the banks should adopt appropriate ways of utilizing renewable energy, automation and other measures to minimize carbon footprint from banking activities. Secondly, all banks should adopt environmentally responsible financing; weighting up environmental risks of project, before making financing decisions; and in particular supporting and fostering growth of upcoming "green" initiatives and projects.

- There are two ways of green banking practices:
 - In-house green banking
 - Green banking practices by the bankers in their business area

In-house green banking

Creating clean and hygienic banking environment, green building, reforestation, online banking, waste management, installation of solar panel on the rooftop of the bank and using high mileage vehicles, reducing sound pollution, using webcam for video conferencing instead of physical meetings, online statements, emailing documents are included in the in-house Green Banking.

Green banking practices by the bankers in their business area

Financing the green projects like Bio-gas Plant, Solar/Renewable Energy Plant, Bio-fertilizer Plant, Effluent Treatment Plant (ETP), Projects having ETP etc, working on specific green projects, voluntary activities of banks are major practices by the bankers in their business areas.

1.6.2 Steps in Green Banking Initiatives

Now the question arise is how banks go green. For this there are various steps or alternative delivery channels by adopting with bank can go green. Some of the steps are discussed as

Under:

a) Go online

Online banking is very useful now. By online customer can check balance online, payment of bills, transfer of funds and remote deposit. It is totally paperless banking. The use of green banking creates less expenditure, less energy and less use of paper in banking activities.

b) Internet Banking

Internet banking is an electronic payment system that enables customers of a financial institution to conduct financial transactions on a website operated by the institution, such as a retail bank, virtual bank, credit union or building society.

c) Green checking of accounts

Now a customer can check his account statement online through ATM or special touch screen. This process is called green checking of accounting. Green checking of account also helps in environment sustainability and reduction of global warming effects.

d) Green loans for home improvements

Any person who is purchasing eco-friendly product for home, bank is providing finance for the equipment at very less interest rate like 4% p.a. it is a very good deal for the person who is purchasing solar equipments.

e) Use of green credit cards

Every rupee you spend on green credit card, the bank will donate fund to the non-profit environment friendly organization for environment sustainability program.

f) Save paper

Bank should use purchase the recycled product for customer use like deposit slip, ATM slip, annual report etc.

g) Power saving equipments

Bank should use less power consumption equipment in place of other equipment. Bank should start campaign to replace GSL bulbs by CFL bulbs. It will also contribute a lot in environment sustainability program.

h) Mobile banking

Mobile banking is very helpful. In one hand it is great ability to check and transfer the balance and in other hand it is helpful in saving time of the customer. It also helps the banking sector to save the paper. Most of banks are now providing mobile banking service.

i) Use of solar and wind energy

Use of solar and wind energy is an efficient way to green banking. State bank of India became the first bank in India to use and invest in solar and wind energy plant.

j) ATM

An electronic banking outlet, which allows customers to complete basic transactions, without the aid of a branch representative or teller. There are two primary types of automated teller machines, or ATMs. The basic units allow the customer to only withdraw cash and receive a report of the account's balance. The more complex machines will accept deposits, facilitate credit card payments and report account information. To access the advanced features of the complex units, you will usually need to be a member of the bank that operates the machine.

1.7 Importance of the study

Green banking is considered as one of the tools of ensuring sustainable development where economic activity will not have any negative impact on the environment. Our country is one of the adversely effected countries in the world because of the world carbon dioxide emission. In spite of global economic activity our own business activity is also creating environmental pollution. Green banking as already discussed is considered as a very important tool to protect our environment from our own business activity. Through this study we will try to find out what bankers are thinking about this. What kinds of forces are influencing them to take and to implement green banking strategy? The findings will help the policy makers of Bangladesh Government and Bangladesh Bank to adjust their approach to the banks of Bangladesh.

1.8 Research Methodology

1.8.1 Nature of the study

Both qualitative and quantitative approach was used in this study. The present study is of analytical and conceptual in nature based on both the primary and the secondary data. The research is conclusive in the form of descriptive design.

1.8.2 Sample Size and Sampling Method

The population of the study was the executive and the customer of selected bank branches. 20 public and private commercial bank branches were purposively selected for this study.20 executive from each branch and 30 banks customer were selected by using convenience sampling method. Data were collected from the respondent as per convenience and co-operative with them.

1.8.3 Sources of Data

Primary data were collected from Branches of the banks in Dinajpur and Nilphamari City like Butch Bangla Bank Ltd, Sonali Bank Ltd, Rupali Bank Ltd, The Dhaka Mercantile Co-operative Bank Ltd, EXIM Bank Ltd, BRAC Bank Ltd, National Bank Ltd, NCC Bank Ltd, The City Bank Ltd, Mercantile Bank Ltd, Bank Asia Ltd, Uttra Bank Ltd, Dhaka Bank Ltd, Shahjalal Islami Bank, Southest Bank Ltd, Social Islami Bank Ltd, Al Arfah Ialami Bank Ltd, and different customer of banking service.

The secondary data had been collected from various newspapers, magazines, internet and commercial banks websites, Bangladesh Bank websites and reviews etc. Furthermore, different working papers, journals and articles have been studied to enrich the literature of the study.

1.8.4 Tools of Data collection

The primary data for this study were collected through self administrated questionnaire prepared by researcher. The questionnaire includes both open ended and close ended question. A five point likert scale (where, 1 is strongly disagree, 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree) were used in this study. Some dichotomous questions were also used to know the consumer opinion in this study. Besides this secondary data were also used.

1.8.5 Data analysis Techniques

Microsoft office package like Microsoft word, Microsoft Excel, Graphical technique (such as pie chart, bar chart, percentage, etc.) have been used for summarizing and illustrating the collected data systematically.

1.9 Scope and Limitation

Banks, in Bangladesh, has started various green banking initiatives. These initiatives bring easiness to the customers and also help the banks in reducing their cost of services. It is not possible to evaluate green banking initiatives taken by all the banks in Bangladesh. Hence, the scope of the present study will be limited to analyze the green banking initiatives taken by the Butch Bangla Bank Ltd, Sonali Bank Ltd, Rupali Bank Ltd, The Dhaka Mercantile Co-operative Bank Ltd, EXIM Bank Ltd, BRAC Bank Ltd, National Bank Ltd, NCC Bank Ltd, The City Bank Ltd, Mercantile Bank Ltd, Bank Asia Ltd, Uttra Bank Ltd, Dhaka Bank Ltd, Shahjalal Islami Bank, Southest Bank Ltd, Social Islami Bank Ltd, Al Arfah Ialami Bank Ltd.Besides I have faced some limitation, such as time limitation, budget problem, unwillingness of the respondents, less awareness of the consumer, limited data providing tendency of bankers etc.

1.10 Layout of Thesis

The findings of the study are presented here in the form of a dissertation. The chapter outlines of the thesis are as follows:

Chapter-1 Introduction: Introduction chapter includes: prelude, statement of the problem, research question, research objectives, definition of key terms, importance of the study, methodology of the study, scope and limitations of the study.

Chapter-2 Literature review: This chapter includes a brief review of results of some previous studies which are related to the present research work and research gap found on those studies.

Chapter-3 Present situation of Green banking practices in Bangladesh:

This chapter focuses on the features of green banking, policy guidelines for green banking, Bangladesh banks initiatives and green banking policy, policy formulation and governance, incorporation of environmental risk, initiating in-house environment management, green finance, climate risk fund, green marketing, employee training and consumer awareness on green event, green strategic planning, green branches, environmental risk management plan, green banking practices and initiatives in Bangladesh.

Chapter-4 Data analysis and interpretation: This chapter includes analysis of primary data which were collected from the respondents through questionnaire.

Chapter-6 Findings, Recommendations and Conclusion: This chapter includes findings, recommendations, conclusion and scope for further research.

Reference

Appendix

CHEPTAR-2

LITERATURE REVIEW

2.1 Review of Literature

Green Banking Policy of BASIC Bank Limited, Bangladesh (2011) was go forwarded in response to increasing consciousness over climate change, environmental degradation, need for urgent measures for sustainable development to be addressed by some of the stakeholders in the world. Banking system holds a unique position in an economy that can affect production, business and other economic activities through their procedure for financing activities which would in turn contribute to protect environment/climate from pollution.

Md. Maruf Ullah (2013), Showed in his research entitled Green Banking in Bangladesh-A Comparative Analysis- His Keywords is Green Banking, Environmental Issues, Bangladesh Bank Policy, Comparative Analysis, His Objectives are, about the green banking issue among SCBs, SDBs, PCBs and FCBs. The specific objectives of the research work are: To explore the Bangladesh Bank policy guidelines for Green Banking and To facilitate a comparative analysis of Green Banking practices in Bangladesh among SCBs, SDBs, PCBs and FCBs. His Methodology is mainly based on extensive literature review and secondary data. Secondary data sources were the reports of Bangladesh Bank, various seminar and workshop information and other relative information published on the banks and other internet sites. And finally his Findings are about Basically Green banking avoids as much paper work as possible and rely on electronic transactions for processing of activities. Less paperwork means less cutting of trees. Here, most of the PCBs and FCBS adopted the GB policy except SCBs and SDBs who have not taken such steps yet. Bangladesh Bank not only gives the policy but also provide technical supports for GB adoption. Bangladesh Banks developed a policy for sanction loans to environmentally harmful projects so that make sure the necessary environmental compliance factors before lending a loan/investment. GB motivates the banking system that reduces use of paper which creates brand image and Create awareness amongst the stakeholders about the environment as well as environmental friendly business practices i.e. solar equipments, ETP, Bio-gas Plant, Hybrid Hoffman Kiln (HHK) etc.

S M Mahfuzur Rahman and Suborna Barua (2016) in their journal entitled The Design and Adoption of Green Banking Framework for Environment Protection: Lessons from Bangladesh, have studied about Environment-friendly Banking, Sustainable Business Strategy, Green Finance, Climate Change, Sustainable Development, Social Responsibility. Their Objective of the study are To look into how the green banking policies of Bangladesh Bank are implemented in practice and thus incorporate into "Strategy" by the scheduled banks of the country, To understand the factors leading to success and failure of the scheduled banks in implementing the Bangladesh Bank"s green banking policies and To identify areas of further intervention for better implementation of the policies. The key approach of their study is to measure the progress of the banks in Bangladesh in implementation of the Bangladesh Bank's Green Banking Guideline (GBG). The assessment is made primarily by using the following criteria: (i) bank-wise weighted average progress level across all policies of the GBG and (ii) policy-wise level of progress across all banks. The study finds that performance of banks in Bangladesh GBG implementation is not very satisfactory although a substantial progress was expected at the end of the three phase period in December 2013. A recent Bangladesh Bank report on green banking records that the performance of scheduled banks has not been very impressive but the banks did fairly well in terms of use of funds allocated for the purpose in the last few quarters (Bangladesh Bank, 2013). The findings of the present study on the phase-wise implementation data show that the implementation of the 19 policies in three phases remained fragmented and policies related to paper-work or deskbased work have been implemented quickly while field level implementation related policies are less prioritized by the scheduled banks.

Atiur Rahman (2010) in his study on 'Financial Services at People's Doorstep' focused on the present monetary and credit policy of Bangladesh Bank towards attaining broader financial enclosure. Bangladesh Bank is carry forwarding with technology driven, innovative, environment and low cost banking approach; conveying a qualitative change in banking, preparation of monetary policy, application of advanced banking technology, and use of Information and Communication Technology (ICT) to extend financial services to the door step of common people. To ensure access to financial services for all, various initiatives have been taken like trade finance; digitalization of the financial sector; channeling liquidity into productive and supply augmenting investments including

agriculture, SMEs, Green Banking and CSR activities; expected to lead to more broad - based inclusive growth and therefore lessen poverty; required for pushing the country on course to the targeted vision of digital Bangladesh by 2021; the year of Golden Jubilee of their independence of Bangladesh.

Rajesh and Dileep (2014), "Role of banks in sustainable economic development through green banking" studied the role of banks in sustainable economic development through Green Banking activities. The study was based on secondary data obtained from the reports of various Banks, various seminars and workshop information and other relative information published on the banks and other internet sites. The study concluded that Banks also contribute to ecological footprint directly and indirectly through investment/lending in their customer enterprises. Green banking can be an avenue to reduce pollution and save the environment aiding sustainable economic growth. Before making the decision to finance a project, banks must see its environmental risks and ensure the project players have environmental safety measures in their plans.

Green Banking Report of Standard chartered Bank Limited, Bangladesh (2013), in this report concerned about increasing consciousness over world climate change, environmental damage, need for urgent measures for sustainable development to be addressed by some of the stakeholders in the world. So, Standard chartered Bank Limited, Bangladesh starts green marketing for green Banking services to customers that can affect production, business and other economic activities through their procedure for financing activities which would in turn contribute to protect environment/climate from pollution. Moreover, efficiency in energy use, water consumption and waste reduction may significantly contribute for operating cost for many of the large banks of the country.

Pratiksha and C. Khedekar (2014), "Banking with Technology-Green Banking" in her research entitled Banking with Technology- Green Banking studied the various technology used by the banking industries to make the environment green. According to study bank should provide basic + premium internet banking product such as opening bank account, Demat holding, standing instruction, investment etc. This Study suggests that bank should conduct seminar and conference to educate the public regarding the uses

of internet banking as well as security issue. She suggests "Virtual Banking" where customer can't deal in cash to those branches which are far from the main branch.

Sustainability Report under Green Banking Initiatives of Trust Bank Limited (2011), in this report concerned about increasing consciousness over world climate change, environmental damage, need for urgent measures for sustainable development to be addressed by some of the stakeholders in the world. This sustainability report consists of only the GRI technical section to meet the requirements of the global reporting Initiative. The scope of the information provided in this report basically covers the activities of trust bank limited in Bangladesh. This report was prepared to make adherence to an application level of the global reporting initiative and is unconfirmed by external assurances.

M. Zubair Hossain, Mahjabeen Ahmed, Nabila Nisha (2015) in their journal entitled "Consumer attitudes and perception towards green banking in Bangladesh", have studied about crucial attitude concept of consumer about green banking and they found Attitudes are predisposed reactions to an object. The concept of Attitudes is particularly important to the service organizations because it affects consumer's selective processes, learning and ultimately the buying behavior. Measuring consumer's attitudes may help a service marketer to get a better picture on both present and potential markets.

2.2 Research gap

Green banking is an environmental friendly system that helps to keep the world habitable as well as performance of the banks. The review of literature reveals that various scholars at the international level have initiated different studies on different aspects of green banking. But at the national level there are very few studies initiated towards green banking. Moreover, in Bangladesh there is hardly any study about Green banking. The present study will be an attempt to fill this gap.

CHAPTER-3

PRESENT SITUATION OF GREEN BANKING PRACTICES IN BANGLADESH

The term Green Banking means promoting environment friendly practices for sustainable growth and reduces the carbon footprint from the banking industry. Green banking thus involves a two interrelated approach. Firstly, green banking focuses on the green transformation of internal operations of all banks. It means all the banks should adopt appropriate ways of utilizing renewable energy, automation and other measures to minimize carbon footprint from banking activities. Secondly, all banks should adopt environmentally responsible financing; weighting up environmental risks of project, before making financing decisions; and in particular supporting and fostering growth of upcoming "green" initiatives and projects. Generally Green banking coverage includes: Sustainable banking, Ethical banking, Green mortgages, Green loans, Green credit cards, Green savings accounts, Green checking accounts, Green money market accounts, Mobile banking, online banking, Remote deposit, Waste Management, Roof Gardening, and Green Financing. Green Banking is any form of banking from that the country and nation gets environmentally benefits. The banking sector can play an intermediary role between economic development and environment protection by promoting environmentally sustainable and socially responsible investment.

There are two ways of green banking practices. One is in-house green banking; another is practice by the bankers in their business area. Creating clean and hygienic banking environment, green building, reforestation, online banking, waste management, installation of solar panel on the rooftop of the bank and using high mileage vehicles, reducing sound pollution, using webcam for video conferencing instead of physical meetings, online statements, emailing documents are included in the in-house Green Banking. Financing the green projects like Bio-gas Plant, Solar/Renewable Energy Plant, Bio-fertilizer Plant, Effluent Treatment Plant (ETP), Projects having ETP etc, working on specific green projects, voluntary activities of banks are major practices by the bankers in their business areas.

3.1 History of Green Banking

Green Banking is any form of banking from that the country and nation gets environmentally benefits. An orthodox bank becomes a green bank by directing its core operations toward the betterment of environment. The banking sector can play an intermediary role between economic development and environment protection by promoting environmentally sustainable and socially responsible investment. The concept of green banking was developed in the western countries. Green Banking was formally started in 2003 with a view to protecting the environment. Then the Equator Principles (EPs) were launched and were initially adopted by some leading global banks, such as Citigroup Inc, The Royal Bank of Scotland, Westpac Banking Corporation. In March 2009, Congressman Chris Van Hollen of USA introduced a Green Bank Act with the aim of establishing a green bank under the ownership of the US government. After introduce the Green Banking initial decision was to minimize the paper use in banking works because to make all kinds of papers need to cutting trees as raw materials (its minimize the green forestation) and for this reason naturally its reduce the Oxygen and increase the carbon-dioxide in airspace/ globe. There are two ways of green banking practices. One is in-house green banking; another is practice by the bankers in their business area. Creating clean and hygienic banking environment, green building, reforestation, online banking, waste management, installation of solar panel on the rooftop of the bank and using high mileage vehicles, reducing sound pollution, using webcam for video conferencing instead of physical meetings, online statements, emailing documents are included in the in-house Green Banking. Financing the green projects like Bio-gas Plant, Solar/Renewable Energy Plant, Bio-fertilizer Plant, Effluent Treatment Plant (ETP), Projects having ETP etc, working on specific green projects, voluntary activities of banks are major practices by the bankers in their business areas. Green banking undertakes proactive measures to protect environment and to address climate change challenges while financing along with efficient use of renewable, non-renewable, human and natural resources.

Bangladesh is one the least developed countries (LDCs) where natural calamities are a common phenomenon, which often causes huge losses. Even climate change impacts are high in our country, which needs proper dealing and management, effective guidance from all quarters, especially from banks. Green banks involve pursuing financial and business policies that are friendly to environment. The Bangladesh Bank has shown keen

interest in it, and as such formulated guidelines in this respect, and encourages the scheduled banks to take measures to create a congenial atmosphere through 'green banking methodology'. Green banking can also reduce the need for expensive branch-banking and customer services. In Bangladesh, Green Banking is launched in 2011 by Bangladesh Bank. The Government of Bangladesh has undertaken a perspective plan (2010-2021) of Green Banking.

3.2 Features

Some important features of green banking operations are as follows:

- ➤ Banks can help environment through automation and online banking.
- ➤ Green banking focuses on social safety and security through changing the negative impacts of the society.
- ➤ In financing, it always gives priority to investments / loans which consider risk factors regarding environmental conditions.
- ➤ It always cares for sustainable and green growth in industrialization and for social purposes.
- ➤ It creates a congenial atmosphere inside and outside the bank.
- ➤ It considers the clients as its family members, and as such, guide and supervise the projects to reduce pollution and thus implement scientific methods in the real sense by implementing environmental due diligence (EDD) checklist.
- > It reduces cost and energy, thus saving money and increasing GDP of a country.
- > It changes the mental faculties of the officials and customers, in line with green sensibilities.
- It helps institutions, men and the nation in general live with dignity

3.3 Policy Guidelines for Green Banking

We are aware that global warming is an issue that calls for a global response. The rapid change in climate will be too great to allow many eco-systems to suitably adapt, since the change have direct impact on biodiversity, agriculture, forestry, dry land, water resources and human health. Due to unusual weather pattern, rising greenhouse gas, declining air quality etc. society demands that business also take responsibility in safeguarding the planet. Green finance as a part of Green Banking makes great contribution to the

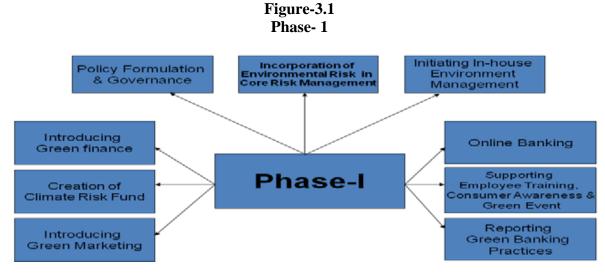
transition to resource-efficient and low carbon industries i.e. green industry and green economy in general. Green banking is a component of the global initiative by a group of stakeholders to save environment.

3.4Bangladesh Bank's Earlier Initiatives

BB is well aware of the environmental degradation situation as mentioned above and has already given time to time directions to all scheduled banks. Commercial Banks are now required to ensure necessary measures to protect environmental pollution while financing a new project or providing working capital to the existing enterprises. Banks have been advised to facilitate their clients with utmost care in opening Letter of Credit (L/C) for installation of Effluent Treatment Plant (ETP) in the industrial units. Banks have been advised to finance in Solar Energy, Bio-gas, ETP and Hybrid Hoffman Kiln (HHK) in brick field under refinance programme of BB. A comprehensive guidelines on Corporate Social Responsibility (CSR) has been issued where banks have been asked to concentrate hard on linking CSR at their highest corporate level for ingraining environmentally and socially responsible practices and engaging with borrowers in scrutiny of the environmental and social impacts. Banks have been brought under the purview of Ecommerce with a view to providing the customers with online-banking facilities covering payments of utility bills, money transfer and transactions in local currency through internet as well. Considering the adverse effects of Climate Change, banks have been advised to be cautious about the adverse impact of natural calamities and encourage the farmers to cultivate salinity resistant crops in the salty areas, water resistant crops in the water locked and flood prone areas, drought resistant crops in the drought prone areas, using surface water instead of underground water for irrigation and also using organic fertilizer, insecticides by natural means instead of using chemical fertilizer and pesticides.

3.5 Green Banking Policy

Now it is the high time for the banks to adopt a comprehensive Green Banking Policy in a formal and structured manner in line with global norms so as to protect environmental degradation and ensure sustainable banking practices. Green Banking Policy is divided into three phases as below:



Source: Bangladesh Bank, BRPD circular NO 02, 2011

3.6 Policy Formulation and Governance

Bank shall formulate and adopt broad environmental or Green Banking policy and strategy approved by their Board of Directors. A high powered Committee comprises of directors from the Board in case of scheduled Bangladeshi Banks and a high powered committee comprises Regional Chief of Global Office and members from the top management including CEO in case of Foreign Banks should be responsible for reviewing the banks environmental policies, strategies and program. Bank shall approve a considerable fund in their annual budget allocation for green banking. Banks are required to establish a separate Green Banking Unit or Cell having the responsibility of designing, evaluating and administering related green banking issues of the bank. A senior executive should be assigned with the responsibility of heading the unit. The unit will report to the high powered committee time to time.

3.7 Incorporation of Environmental Risk in CRM

Banks shall comply with the instructions stipulated in the detailed guidelines on Environmental Risk Management (ERM) in consideration of a part of the Green Banking Policy. Bank shall incorporate Environmental and Climate Change Risk as part of the existing credit risk methodology prescribed to assess a prospective borrower. This will include integrating environmental risks in the checklists, audit guidelines and reporting formats. All of this will help mainstream Environmental Risk that cover possible sources of Environmental Risk such as Land use, Climate change related events (cyclone,

drought), animal diseases/pathogens such as avian influenza, solid waste including waste feed, animal waste, carcasses, sediments, wastewater discharges, hazardous materials, etc will be reviewed under Environmental Due Diligence (EDD) checklists

3.8 Initiating In-house Environment Management

Banks shall prepare an inventory of the consumption of water, paper, electricity, energy etc. by its offices and branches in different places. Then it should take measures to save electricity, water and paper consumption. A 'Green Office Guide' or at least a set of general instructions should be circulated to the employees for efficient use of electricity, water, paper and reuse of equipments. In place of relying on printed documents, online communication should be extensively used (where possible) for office management and make sure that the printers are defaulted to duplex for double-side printing to save papers. Banks may apply Confront in printing to reduce use of ink, use scrap paper as notepads and avoid disposable cups/glasses to become more eco- friendly. Installation of energy efficient electronic equipments and automatic shutdown of computers, fans, lights, air coolers etc. will help reducing electricity consumption. Energy saving bulbs should replace normal bulbs in branches/offices of the banks. Banks should make plan to use solar energy at their premises to save electricity. Bank should take steps to save energy from corporate business travel and encourage employees to purchase energy efficient cars (that consume less fuel) can reduce gas and petroleum consumption.

3.9 Introducing Green Finance

Eco friendly business activities and energy efficient industries will be given preference in financing by bank. Environmental infrastructure such as renewable energy project, clean water supply project, wastewater treatment plant, solid and hazardous waste disposal plant, bio-gas plant, bio-fertilizer plant should be encouraged and financed by bank. Consumer loan programs may be applied for promoting environmental practices among clients.

3.10 Creation of Climate Risk Fund

Bank should finance the economic activities of the flood, cyclone and drought prone areas at the regular interest rate without charging additional risk premium. However, banks should assess their environmental risks for financing the sectors in different areas for creating a Climate Change Risk Fund. This will be used in case of emergency. The bank would ensure regular financing flows in these vulnerable areas and sectors. The fund could be created as part of banks' CSR expenses.

3.11 Introducing Green Marketing

Green marketing is the marketing of products that are presumed to be environmentally safe. Green marketing incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising. It refers to the process of selling products and/or services based on their environmental benefits. Such a product or service may be environmentally friendly in it or produced and/or packaged in an environmentally friendly way. Banks should use environmental causes for marketing their services to consumer. Green marketing is expected to help awareness development among common people.

3.12 Online Banking

Online banking is the practice of making bank transactions or paying bills via the Internet on a secure website of the respective bank that allows the customers to make deposits, withdrawals and pay bills. Banks should give more emphasis to make the easiest way to help environment by eliminating paper waste, saving gas and carbon emission, reducing printing costs and postage expenses.

3.13 Supporting Employee Training and Consumer Awareness on Green Event

Employee awareness development and training on environmental and social risk and the relevant issues should be a continuous process as part of the bank's Human Recourse Development. Awareness development among consumers and clients would be a continuous job of a bank under its public relation department.

3.14 Disclosure and Reporting of Green Banking Activities

Banks shall report on the initiatives/practices to BB and disclose in their respective websites.

Figure- 3.2 Phase- 2 Sector Specific Green Strategic Setting up **Green Branches** Environmental Policies Planning Improved In-house Rigorous Programs to Environment Educate Clients Management Phase-II Formulation of Disclosure & Reporting Bank Specific of Environmental Green Banking Risk Management Activities Plan & Guidelines

Source: Bangladesh Bank, BRPD circular NO 02, 2011

3.15 Sector Specific Environmental Policies

Banks need to formulate strategies to design specific policies for different environmental sensitive sectors such as Agriculture, Agri-business (Poultry and Dairy), Agro farming, Leather(Tannery), Fisheries, Textile and Apparels, Renewable Energy, Pulp and Paper, Sugar and distilleries, Construction and Housing, Engineering and Basic Metal, Chemicals (Fertilizers, Pesticides and Pharmaceuticals), Rubber and Plastic Industry, Hospital/Clinic, Chemical Trading, Brick Manufacturing, Ship breaking etc.

3.16 Green Strategic Planning

A bank should determine green targets to be attained through strategic planning. Bank should determine a set of achievable targets and strategies, and disclose these in their annual reports and websites for green financing and in-house environment management as well. For in-house environment management, the target areas should cover attaining energy efficiency in the form of the use of renewable energy, reduction of electricity, gas, and petrol consumption, reduction of Green House Gas(GHG) emissions, issuance of estatements, electronic bill pay, saving papers, environment friendly office buildings etc. For Green Financing, the target areas should cover reducing loans for certain environmentally harmful activities, attaining a particular percentage of environmental loans as percentage of total, introducing eco-friendly financial products etc.

3.17 Setting up Green Branches

A Green Branch should be featured by the provision of the maximum use of natural light, use of renewable energy, use of energy saving bulbs and other equipments, reduced water and electricity use, use of recycled water etc. Such a branch of a bank would be specifically designated as a 'Green Branch'. A Green Branch will be entitled to display a special logo approved by Bangladesh Bank. The criteria for certification of a 'Green Branch' will be circulated by Bangladesh Bank in due course of time.

3.18 Improved In-House Environment Management

Strategy of reuse, recycling of materials and equipments, and source reduction and waste minimization strategy should be part of in-house environmental management in Phase-II. Banks should increasingly rely on virtual meeting through the use of video conferencing in lieu of physical travel which would help saving cost and energy.

3.19 Formulation of Bank Specific Environmental Risk Management Plan

A bank should develop and follow an environmental risk management manual or guidelines in their assessment and monitoring of project and working capital loans. In addition to the compliance of national regulation the bank may set internationally accepted higher environmental standards. In this connection, Green initiatives by a group of banks will not only be effective but will also offer competitive advantage. Bank alliances may prepare standard and guidelines for themselves for improving Green Banking practices.

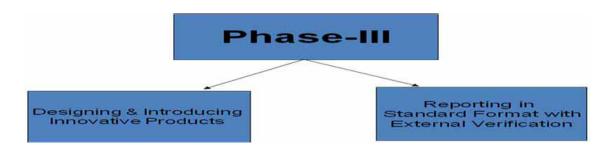
3.20 Rigorous Programs to Educate Clients

Clients and business houses should be encouraged and influenced to comply with the environmental regulations and undertake resource efficient and environmental activities. Banks should introduce rigorous programs to educate clients.

3.21 Disclosure and Reporting of Green Banking Activities

Banks should start publishing independent Green Banking and Sustainability reports showing past performances, current activities, and future initiatives. Updated and detailed information about banks environmental activities and performances of major clients should be disclosed.

Figure- 3.3 Phase- 3



Source: Bangladesh Bank, BRPD circular NO 02, 2011

A system of Environmental Management should be in place in a bank before the initiation of the activities of Phase- III. Banks are expected to address the whole eco-system through environment friendly initiatives and introducing innovative products. Standard environmental reporting with external verification should be part of the phase. The time lining for the actions to be taken under Phase-III should not exceed December 31, 2013.

3.22 Designing and Introducing Innovative Products

Alongside avoiding negative impacts on environment through banking activities, banks are expected to introduce environment friendly innovative green products to address the core environmental challenges of the country.

3.23 Reporting in Standard Format with External Verification

Banks should publish independent Green Annual Report following internationally accepted format like Global Reporting Initiatives (GRI) targeting their stakeholders. There should be arrangement for verification of these publications by an independent agency or acceptable third party.

3.24 Reporting Green Banking Practices on Quarterly Basis

Banks shall report their initiatives/activities under the said program to the Department of Off-site Supervision of Bangladesh Bank on quarterly basis. Banks shall submit their first quarterly report on June 30, 2011 basis within July 15, 2011 and similarly they will be

required to continue to submit reports on the subsequent quarters within the next 15 days of the respective quarter end.

Banks shall keep their annual report and websites updated with the disclosures on green banking initiatives/activities. 5. The compliant banks practicing Green Banking will have the following preferential treatments:

- I. BB will award points to banks on Management component while computing CAMELS rating where there will ultimately be a positive impact on overall rating of a bank.
- II. BB will declare the names of the Top Ten Banks for their overall performance in green banking activities in the BB websites.
- III. BB will actively consider green banking activities/practices of a bank while according permission for opening new bank branch.

3.25 Green Banking Practices and Initiatives in Bangladesh

Bangladesh Bank has set examples for others by pioneering green banking initiatives while BB has been proactively guiding the banks and NBFIs for diverse sustainable banking initiatives since 2011. In such aspect, green banking initiatives of BB broadly categorized into the following aspects: policy initiatives, monitoring of green banking activities of banks and NBFIs, refinance support from BB in diverse green products/ sectors, and BB's own initiatives for environmental management.

3.25.1 Policy Initiatives

In January 2011, guidelines on Environmental Risk Management (ERM) was issued to all banks and NBFIs which was first policy instruction of BB regarding green banking. Policy guidelines for green banking was issued to the scheduled banks in February 2011. Policy guidelines for green banking was issued to NBFIs in August 2013 and to the new banks (scheduled in 2013) in September 2013. BB aligned the phase out plan to implementing policy guidelines for all banks in December 2013. It issued a circular in September 2014 to expedite the ongoing initiatives of banks and NBFIs at faster pace for sustaining the environment compatible to climate change risk, minimum target of direct green finance as certain percentage of total funded loan to be disbursed/ invested in each year effective from January 2015 onwards. For banks scheduled before 2013, target will be 5 percent of the total disbursement/ investment of funded loan in 2015. For new banks

scheduled in 2013 and NBFIs, target will be 3 percent and 4 percent respectively of the total disbursement/investment of funded loan in 2015. This target will be 5 percent of the total loan disbursement/investment from January 2016 onwards for all banks and NBFIs.

3.25.2 Green Finance

A total amount of Taka 465.9 billion was disbursed during FY15 by 46 banks involved in green finance. The relative contributions of different institutions were as follows; PCBs (78.6 percent) followed by FCBs (15.4 percent), NBFIs (5.1 percent), SCBs (0.9 percent) and DFIs (0.1 percent). Product-wise and direct and indirect green finance by banks are given in Table-3.1 and Table 3.2 respectively.

Table: 3.1 Green finance in different products: FY15

					(mil	lion Taka)
Category of	SCBs	DFIs	PCBs	FCBs	NBFIs	Total
green finance						
Renewable energy	107.4	5.8	2284.2	554.5	6249.3	9201.3
Energy efficiency	92.0	0.0	1400.7	0.0	81.7	1574.4
Solid waste management	14.9	0.0	2112.7	0.0	0.0	2127.6
Liquid waste management	22.0	0.0	1755.5	52.5	202.0	2032.0
Alternative energy	17.3	0.0	0.0	0.0	0.0	17.3
Fire burnt brick	1797.3	34.0	5292.3	0.0	59.0	7182.5
Non fire block brick	0.0	0.0	20.5	0.0	0.0	20.5
Recycling and recyclable	0.0	8.9	2376.8	26.8	124.3	2536.8
product						
Green industry	420.0	0.0	831.1	2638.3	80.0	3969.5
Safety and security of factory	0.0	0.0	236.4	1.5	24.7	262.6
Others	596.3	37.4	3788.4	0.0	43.2	4465.2
Total	3067.2	86.1	20098.6	32733.6	6864.2	33389.7

Source: Bangladesh Bank-Annual Report on Green Banking 2015

Table: 3. 2
Direct and indirect green finance: FY15

			(million Taka)
Type of	Direct	Indirect	Total	Sector
banks/NBFIs	green	green	green	wise
	finance	finance	finance	contribution
SCBs	3067.2	910.6	3977.7	0.9
DFIs	86.1	263.0	349.0	0.1
PCBs	20098.6	346134.7	366233.2	78.6
FCBs	3273.6	68240.7	71514.3	15.4
NBFIs	8320.7	15493.0	23813.6	5.1
Total	34846.0	431041.9	465887.9	100.0

Source: Bangladesh Bank-Annual Report on Green Banking 2015

3.25.3 Environmental Risk Management (ERM)

Environmental risk management taken into account in disbursing credit. An environmental risk rating is estimated and a threshold level is applied in taking a decision to disburse loan following the guidelines on ERM for banks and NBFIs. ERR is applicable for the projects as well as the credit facility that fall above the threshold limit. All banks conducted environmental risk rating in FY15. The number of projects applicable for Environmental Due Diligence (EDD) during the year was 55881. Total amount of Taka 1500.1 billion disbursed in 39613 rated projects out of 47926 rated projects in FY15 (Table 3).

Table: 3. 3
Environmental risk rating of banks and NBFIs: FY15

				(million Taka)
Type of	No. of	No. of	No. of	Amount
banks/NBFIs	projects	projects	rated	disbursed in
	applicable	rated	projects	rated projects
	for EDD		financed	
SCBs	2224	1804	1718	28896.8
DFIs	225	225	225	3824.3
PCBs	47316	40575	33897	1281527.1
FCBs	3765	2855	1375	109230.5
NBFIs	2351	2467	2398	76578.3
Total	55881	47926	39613	1500057.0

Source: Bangladesh Bank-Annual Report on Green Banking 2015

3.25.4 Climate Risk Fund and Green Marketing

In FY15 total amount utilized from climate risk fund by 22 banks and for green marketing by 29 banks were Taka 564.3 million and Taka 168.7 million respectively. For the NBFIs, total amount disbursed from climate risk fund was Taka 4.3 million and total expenditure for green marketing was Taka 4.9 million in FY15.

3.25.5 Online Banking and Energy Efficiency

55 banks out of 56 banks had online branches at the end of FY15 whereas the number was 54 at the end of FY14. Online branches were 51.9 percent of total branches at the end of FY14 which stood at 68.1 percent at end of FY15. Green banking policy encourages the banks to establish branches powered by solar energy. Following the principle of green banking, the number of branches powered by solar energy was 315 at the end of FY14 which stood at 416 at the end of FY15.

3.25.6 BB's in House Environmental Management

BB installed solar power system on its rooftop for energy efficiency and chiller based central air conditioning system for reducing CFC emission. BB initiated the process to measure the carbon footprint of its own. E-recruitment, documentation management system, leave management system, online salary and account statement, personal file update system, online office orders, electronic pass for visitors and many have been introduced through BB intranet. All the departments of BB's head office and its nine branch offices have already been brought under a computer network (LAN/WAN), connecting more than 3500 PCs. BB has introduced open data initiative for all through its interactive website which is updated at all time. Most of the regulatory reporting from banks and NBFIs are collected through web upload and Enterprise Data Warehouse (EDW) system. Bangladesh Automated Cheque Processing System (BACPS), Bangladesh Electronic Fund Transfer Network (BEFTN), Online Credit Information Bureau and Enterprise Resources Planning (ERP) have been started in operation. Bangladesh Bank has also started e-procurement.

3.25.7 BB's Refinance Schemes for Green Products/Sectors

To promote renewable energy and environment friendly financial activity of Bangladesh, BB formulated a Revolving Refinance Scheme from its own source amounting Taka 2.0 billion in 2009. Refinance facilities are extended to the Participating Financial Institutions (PFIs) in this purpose. To avail refinance facility till 30 June 2015, 37 banks and 15 NBFIs signed participation agreement with BB. Initially only five products were eligible for refinance. BB increased the green product lines under the scheme to 47 in FY15. BB segregated these products into 11 categories which are: renewable energy, energy efficiency, solid waste management, liquid waste management, alternative energy, fire burnt brick, non fire block brick, recycling and recyclable product, green industry, ensuring safety and work environment of factories and miscellaneous. The cumulative refinanced amounts of the scheme up to June 2015 stood at Taka 1909.2 million. Total disbursement of refinance scheme for green products through BB increased by 3.1 percent to Taka 393.5 million in FY15 which was Taka 381.5 million in FY14. Productwise total disbursement for green products under refinance scheme increased in FY15 except effluent treatment plant. The disbursement trend of this fund is given in Table 4 and Chart 1. In September 2014, BB introduced a refinance scheme funded by liquidity of Shariah based banks and NBFIs in excess of their requirement which will be explicitly for direct green finance of the said banks and NBFIs. These banks and NBFIs can utilize this fund for financing in the 47 products.

Table: 3.4

Disbursement trend of BB refinance scheme for green products

				(m	illion Taka)
Green product category	FY11	FY12	FY13	FY14	FY15
Bio gas	50.2	133.2	113.6	212.8	83.3
Solar home system	59.4	10.5	40.2	32.2	87.5
Solar irrigation pump	12.4	8.4	0.0	17.9	26.5
Effluent treatment plant	10.8	22.2	57.4	10.0	0.0
Effluent treatment plant	0.0	55.0	172.2	59.0	47.0
Solar assembly plant	0.0	248.8	122.7	49.6	148.1
Vermicompost	0.0	0.0	0.0	0.0	1.1
Total	132.8	478.1	506.1	381.5	393.5

Source: Bangladesh Bank-Annual Report on Green Banking 2015

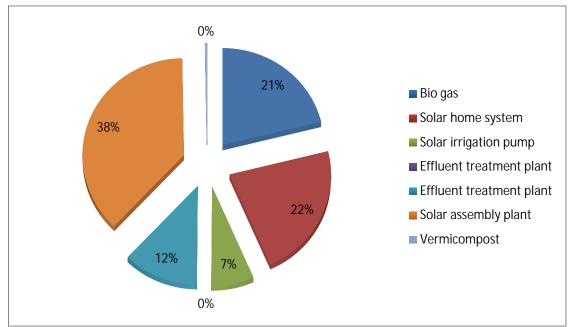


Chart: 3.1 Shares of green products in refinancing: FY 15

Source: Bangladesh Bank-Annual Report on Green Banking 2015.

3.25.8 ADB Supported 'Financing Brick Kiln Efficiency Improvement Project

To improve the efficiency of the brick kiln through efficient use of technology and energy including reducing Green House Gas (GHG) and Suspended Particulate Matter Brick Kiln Efficiency Improvement Project was established in BB financed by Asian Development Bank (ADB) in 2012. In this disbursement process, total amount of loan from ADB was about USD 50.0 million or equivalent Taka. It has two parts: Part-A: USD 30.0 million (approximately)/equivalent Taka will be provided for conversion of Fixed Chimney Kiln (FCK) to Improved Zigzag Kiln and Part-B: about USD 20.0 million/equivalent Taka for establishment of new Vertical Shaft Brick Kiln (VSBK), Hybrid Hoffman Kiln (HHK) and Tunnel Kiln. On lending facilities are extended to the PFIs in this purpose. Till 30 June 2015, 35 banks and 18 NBFIs signed participation agreement with BB. Up to December 2014, USD 4.6 million was disbursed under this project. During April- June 2015 period, total USD 2.74 million was disbursed under this project. In FY15, the cumulative disbursement was USD 7.4 million.

CHAPTER-4

DATA ANALYSIS AND INTERPRETATIONS

The chapter comprises the study findings to be discussed under different sections. Accordingly, categorization of respondents with regard green banking practices and its function: A study on Dinajpur and Nilphamari city, Bangladesh was discussed in detail successively.

Demographic profile

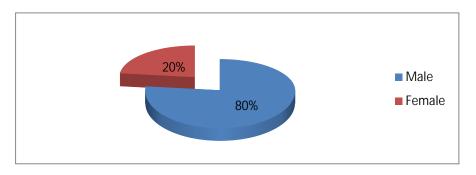
4.1 Demographic profile of the Bankers

Table- 4.1 Sex Distribution of the Respondents

				Valid	
		Frequency	Percent	Percent	Cumulative Percent
Valid	Male	18	90.0	90.0	90.0
	Female	2	10.0	10.0	100.0
	Total	20	100.0	100.0	

Source: Field Survey, 2016

Chart- 4.1
Sex Distribution of the Respondents



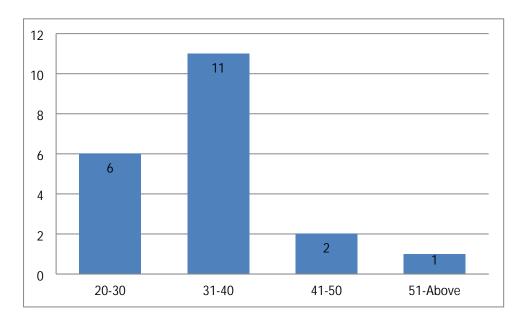
Source: Field Survey, 2016

Interpretation: From the above table and chart, high percentages of the respondents (90%) were male, while female constituted about 10% of the population. This implies that 90% male associated with the profession Bank executive of the respondents.

Table- 4.2 Age Distribution of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-30	6	30.0	30.0	30.0
	31-40	11	55.0	55.0	85.0
	41-50	2	10.0	10.0	95.0
	51-Above	1	5.0	5.0	100.0
	Total	20	100.0	100.0	

Chart- 4.2
Age Distribution of the Respondent



Source: Field Survey, 2016

Interpretation: From above table and chart, the age distribution of Bankers in the study area reveals that majority of the respondents 55% fell in the age group of 31-40 years, about 30% were between 20-30years, 10% between 41-50 year while 5.0% above 50 years.

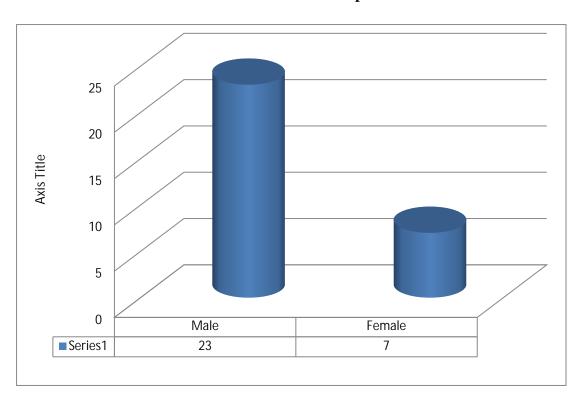
4.2 Demographic profile of the Banking Consumer

Table- 4.3
Sex Distribution of the Respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	23	76.7	76.7	76.7
	Female	7	23.3	23.3	100.0
	Total	30	100.0	100.0	

Source: Field Survey, 2016

Chart- 4.3
Sex Distribution of the Respondent



Source: Field Survey, 2016

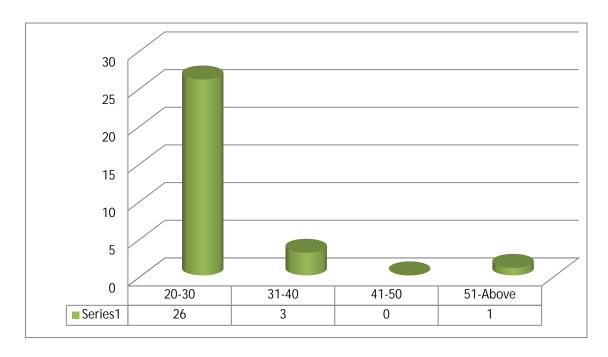
Interpretation: From above table and chart, high percentages of the respondents (76.7%) were male, while female constituted about 23.3% of the population. This implies that 76.7% male associated with the Banking customer of the respondents.

Table-4.4 Age Distribution of the Respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-30	26	86.7	86.7	86.7
	31-40	3	10.0	10.0	96.7
	51-Above	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Chart- 4.4

Age Distribution of the Respondent



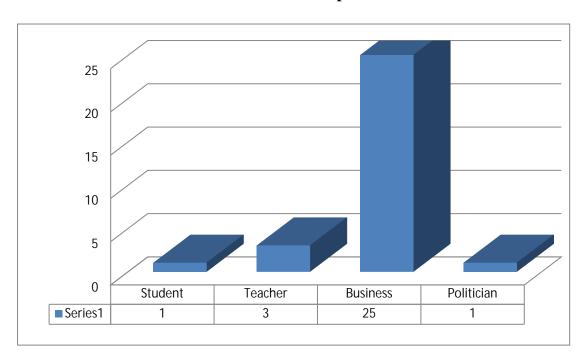
Source: Field Survey, 2016

Interpretation: From above table and chart, the age distribution of Bankers in the study area reveals that majority of the respondents 86.7% fell in the age group of 20-30 years, about 10% were between 31-40 years while 3.3% above 51 years.

Table- 4.5
Profession of the Respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	1	3.3	3.3	3.3
	Teacher	3	10.0	10.0	13.3
	Business	25	83.3	83.3	96.7
	Politician	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Chart- 4.5
Profession of the Respondent



Source: Field Survey, 2016

Interpretation: From above table and chart, 83.3% of the respondents were Business as their major occupation while 10% of the respondents were Teacher and 3.3% were the profession of Student and Politician.

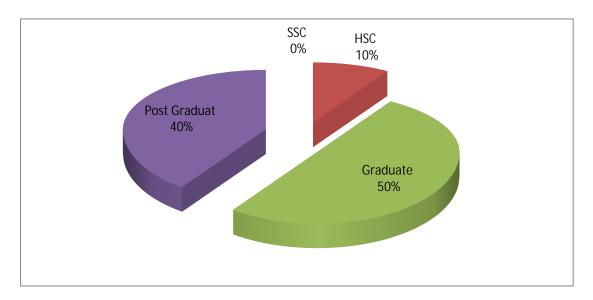
Table- 4.6
Education Level of the Respondent

				Valid	Cumulative
			Percent	Percent	Percent
Valid	HSC	3	10.0	10.0	10.0
	Graduate	15	50.0	50.0	60.0
	Post Graduate	12	40.0	40.0	100.0
	Total	30	100.0	100.0	

Source: Field Survey, 2016.

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Chart- 4.6
Education Level of the Respondent



Source: Field Survey, 2016.

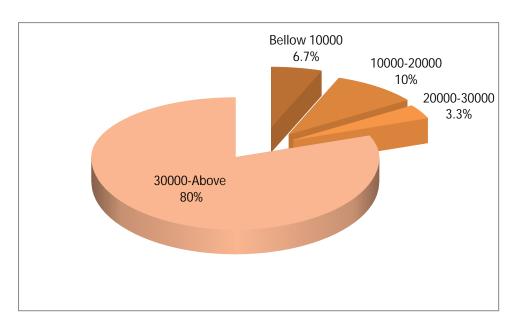
Interpretation: From above table and chart, 50% had Below Graduate education; 40.0% of the respondents had Post Graduate Degree. The respondents that had H.S.C education were 3%. This indicates that majority of the respondents were Graduate which will make communication and interaction easy during dissemination of Green Banking information

Table- 4.7
Income Level of the Respondent

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Bellow 10000	2	6.7	6.7	6.7
10000-20000	3	10.0	10.0	16.7
20000-30000	1	3.3	3.3	20
30000-Above	24	80	80	100.0
Total	30	100.0	100.0	

Source: Field Survey, 2016.

Chart- 4.7
Income Level of the Respondent



Source: Field Survey, 2016

Interpretation: From above table and chart, the Income level of respondents in the study area reveals that majority of the respondents (80%) fell in the group of Below 30000, about 10% were between 10000-20000, 6.7% between bellow 10000 while only 3.3% were 20000-30000 group.

4.3 Frequency Distribution of Salient Factors

Table- 4.8 Knowledge about Green Banking

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	1	5.0	5.0	5.0
	Agree	19	95.0	95.0	100.0
	Total	20	100.0	100.0	

Source: Field Survey, 2016

Interpretation: Table-4.8 show that 95.0% respondent expressed agree that they Have sound knowledge about Green Banking. On the other hand, only 5% respondents expressed Neutral. Any respondent don't disagree with this term. This indicates that majority of the respondents believed that they Have sound knowledge about Green Banking.

Table- 4.9
Green Banking Unit in the Bank

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	15	75.0	75.0	75.0
	Strongly Agree	5	25.0	25.0	100.0
	Total	20	100.0	100.0	

Source: Field Survey, 2016

Interpretation: Table-4.9 show that 75.0% respondent expressed agree that they Have Green Banking unit in their bank. On the other hand, 25% respondents expressed Strongly Agree with this. Any respondent don't disagree with this term. This indicates that majority of the respondents believed that they Have Green Banking unit in their bank.

Table- 4.10 Followed Green Banking Policy of Bangladesh Bank

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	16	80.0	80.0	80.0
	Strongly Agree	4	20.0	20.0	100.0
	Total	20	100.0	100.0	

Interpretation: Table-4.10 show that 80% respondent expressed agree that they are following Green Banking policy of Bangladesh Bank. On the other hand, 20% respondents expressed Strongly Agree with this. Any respondent don't disagree with this term. This indicates that majority of the respondents believed that they are following Green Banking policy of Bangladesh Bank.

Table- 4.11
Current Green Banking Policy Productive to Protecting Environment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	5.0	5.0	5.0
	Neutral	2	10.0	10.0	15.0
	Agree	17	85.0	85.0	100.0
	Total	20	100.0	100.0	

Source: Field Survey, 2016

Interpretation: Table-4.11 show that 85% respondent expressed agree that they are Satisfied with the current Green Banking policy, that is productive to protecting environment. On the other hand, 10% respondents expressed Neutral with this. 5% of the Respondent disagrees with this term. This indicates that majority of the respondents Satisfied with the current Green Banking policy that is productive to protecting environment.

Table- 4.12 Green Banking Training Needed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	5.0	5.0	5.0
	Neutral	5	25.0	25.0	30.0
	Agree	13	65.0	65.0	95.0
	Strongly Agree	1	5.0	5.0	100.0
	Total	20	100.0	100.0	

Interpretation: Table-4.12 show that 65% respondent expressed agree that they needed training on Green Banking for the employee of this bank. On the other hand, 25% respondents expressed Neutral with this. 5% respondent disagrees with this term and 5% expressed strongly agree that they needed training. This indicates that majority of the respondents believed that they needed training on Green Banking for the employee of this bank.

Chart- 4.13
Loan Given Considering Without Green Banking

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	13	65.0	65.0	65.0
	Disagree	7	35.0	35.0	100.0
	Total	20	100.0	100.0	

Source: Field Survey, 2016

Interpretation: Table-4.12 show that 65% respondent expressed strongly disagree that they giving loan without considering green banking. On the other hand, 35% respondents expressed disagree with this. This indicates that majority of the respondents believed that they don't giving loan without considering green banking.

Table- 4.14
Given Loan to entrepreneur, if they collect certificate from Environment
Department

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	20	100.0	100.0	100.0

Interpretation: From table 4.14 we can see that all the banks have agreed that they give loan to entrepreneur such as Tobacco cultivation and marketing, Bricks manufacturing organization that are destroying environment, if they collect certificate from Environmental Department.

Table- 4.15
Banking seminar or campaign

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	11	55.0	55.0	55.0
	Agree	8	40.0	40.0	95.0
	Strongly Agree	1	5.0	5.0	100.0
	Total	20	100.0	100.0	

Source: Field Survey, 2016

Interpretation: Table-4.15 show that 40% respondent expressed agree that they have Green Banking seminar or campaign performed in their bank. On the other hand, 55% respondents expressed Neutral with this. 5% respondents strongly agree with this term. This indicates that Moderate number of the respondents believed that they have Green Banking seminar or campaign performed in their bank.

Table- 4.16
Seminar, Report And Advertisement On Green Banking Policy.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	4	20.0	20.0	20.0
	Agree	16	80.0	80.0	100.0
	Total	20	100.0	100.0	

Interpretation: Table-4.16 show that 80% respondent expressed agree that they are supporting seminar, report and advertisement are required for providing information about Green Banking Policy of this bank to entrepreneur. On the other hand, 20% respondents expressed Neutral with this. Any respondent don't disagree with this term. This indicates that majority of the respondents supporting seminar, report and advertisement are required for providing information about Green Banking Policy of this bank to entrepreneur

Table- 4.17
Environment Risk Fund of Bangladesh Bank Enough For Procurement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	5.0	5.0	5.0
	Neutral	10	50.0	50.0	55.0
	Agree	9	45.0	45.0	100.0
	Total	20	100.0	100.0	

Source: Field Survey, 2016

Interpretation: Table-4.17 show that 45% respondent expressed agree that environment risk fund of Bangladesh Bank is enough for procurement of environment destruction. On the other hand, 50% respondents expressed Neutral with this. 5% of the respondent are not agree that environment risk fund of Bangladesh Bank is enough for procurement of environment destruction. This indicates that a moderate of the respondents supporting environment risk fund of Bangladesh Bank.

Table- 4.18
Follow Green Technology

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	15	75.0	75.0	75.0
	Strongly Agree	5	25.0	25.0	100.0
	Total	20	100.0	100.0	

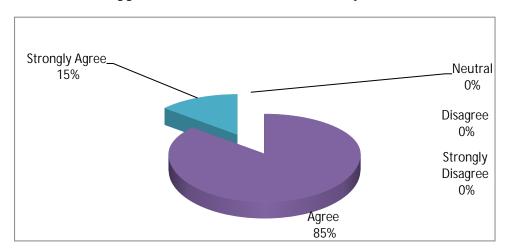
Interpretation: Table-4.18 show that 75% respondent expressed agree that their organization is following green technology. On the other hand, 25% respondents expressed strongly agree with this. This indicates that majority of the respondents believed that their organization is following green technology.

Table- 4.19
Support Environmental Sustainability Vision

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	17	85.0	85.0	85.0
	Strongly Agree	3	15.0	15.0	100.0
	Total	20	100.0	100.0	

Source: Field Survey, 2016.

Chart- 4.8
Support Environmental Sustainability Vision



Source: Field Survey, 2016

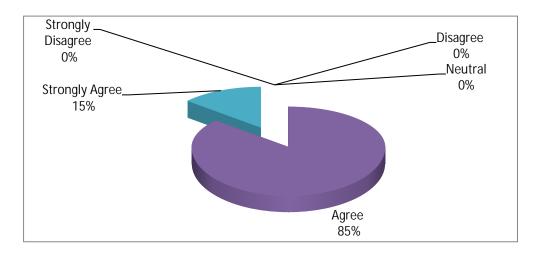
Interpretation: Above Table- 4.19 and Chart- 4.8 show that 85% respondent expressed agrees that their organization is supporting environmental sustainability vision. On the other hand, 15% respondents expressed strongly agree with this. This indicates that majority of the respondents believed that their organization is supporting environmental sustainability vision.

Table- 4.20
Waste Management & Pollution Management

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	17	85.0	85.0	85.0
	Strongly Agree	3	15.0	15.0	100.0
	Total	20	100.0	100.0	

majority of the respondents believed that their organization has waste management & pollution management policy.

Chart- 4.9
Waste Management & Pollution Management



Source: Field Survey, 2016

Interpretation: Above Table- 4.20 and Chart- 4.9 that 85% respondent expressed agrees that their organization has waste management & pollution management policy. On the other hand, 15% respondents expressed strongly agree with this. This indicates that

Table- 4.21
Bank account

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	22	73.3	73.3	73.3
	No	8	26.7	26.7	100.0
	Total	30	100.0	100.0	

Interpretation: Table-4.21 shows that 73.3% respondent have an account in the bank that provides green banking service. On the other hand, 26.7% respondents have no account in such a bank. This indicates that majority of the respondents have an account in the bank that provides green banking service.

Table-4.22
Green Banking as a Proactive Measure to Protect Environment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	26	86.7	86.7	86.7
	No	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

Source: Field Survey, 2016

Interpretation: Table-4.22 shows that 86.7% respondent say yes that green banking undertake proactive measures to protect environment. On the other hand, 13.3% respondents say no in such an issue. This indicates that majority of the respondents believed that green banking undertake proactive measures to protect environment.

Chart- 4.23 Knowledge about Green Mortgage

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	12	40.0	40.0	40.0
	No	18	60.0	60.0	100.0
	Total	30	100.0	100.0	

Interpretation: Table-4.23 shows that 40% respondent say yes that they have knowledge about green mortgage offers better rates or terms for energy efficient houses. On the other hand, 60% respondents say no in such a issue. This indicates that a moderate number of the respondents has knowledge about green mortgage offers better rates or terms for energy efficient houses.

Chart-4.24 Having Green Credit Card

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	7	23.3	23.3	23.3
No	23	76.7	76.7	100.0
Total	30	100.0	100.0	

Source: Field Survey, 2016

Interpretation: Table-4.24shows that only 23.3% respondent have a green Credit card in any bank. On the other hand, 76.7% respondents have no green Credit card in any bank. This indicates that majority of the respondents have no green Credit card in any bank

Chart- 4.25
Rewards Or Points For Contributing To Eco-friendly Charitable Organizations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	7	23.3	23.3	23.3
	No	23	76.7	76.7	100.0
	Total	30	100.0	100.0	

Interpretation: Table-4.25 shows that 23.3% respondent say yes that they have knowledge about earning rewards or points which contribute to eco-friendly charitable organizations. On the other hand, 76.7% respondents say no in such an issue. This indicates that a majority of the respondents has no knowledge about earning rewards or points which contribute to eco-friendly charitable organizations.

Chart- 4.26
Having Green reward checking accounts

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	3	10.0	10.0	10.0
No	27	90.0	90.0	100.0
Total	30	100.0	100.0	

Source: Field Survey, 2016

Interpretation: Table-4.26 shows that 10% respondent say yes that they have Green reward checking accounts. On the other hand, 90% respondents say no in such an issue. This indicates that a majority of the respondents has no knowledge about Green reward checking accounts.

Chart- 4.27
It is helpful for Green banking to use online banking instead of branch banking

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	29	96.7	96.7	96.7
No	1	3.3	3.3	100.0
Total	30	100.0	100.0	

Interpretation: Table-4.27 shows that 96.7% respondent say yes that they think Green banking is helpful to use online banking instead of branch banking. On the other hand, 3.3% respondents say no in such an issue. This indicates that a majority of the respondents think Green banking is helpful to use online banking instead of branch banking.

Chart- 4.28
Green banking system is a paperless banking system

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	22	73.3	73.3	73.3
No	8	26.7	26.7	100.0
Total	30	100.0	100.0	

Source: Field Survey, 2016

Interpretation: Table-4.28 shows that 73.3% respondent say yes that they Green banking system is a paperless banking system. On the other hand, 26.7% respondents say no in such an issue. This indicates that a majority of the respondents think Green banking system is a paperless banking system.

Chart- 4.29
Climate risk fund

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	20	66.7	66.7	66.7
	No	10	33.3	33.3	100.0
	Total	30	100.0	100.0	

Interpretation: Table-4.29 shows that 66.6% respondent have knowledge about the Climate risk fund for changing environment. On the other hand, 33.3% respondents say no in such an issue. This indicates that a majority of the respondents have knowledge about the Climate risk fund for changing environment

Chart- 4.30
Green banking attaches more importance to environmental factors than normal banking.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	28	93.3	93.3	93.3
	No	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

Source: Field Survey, 2016

Interpretation: Table-4.22 shows that 93.3% respondent think that Green banking attaches more importance to environmental factors than normal banking. On the other hand, 6.7% respondents say no in such an issue. This indicates that majority of the respondents believed that Green banking attaches more importance to environmental factors than normal banking.

CHAPTER-5:

FINDINGS, RECOMMENDATIONS AND CONCLUSION

5.1 Findings

Green technology like communication through E-mail avoids as much paper work as possible and relies on electronic transactions for processing of activities. Less paperwork means less cutting of trees.

- ➤ Green Banking motivates the banking that reduces use of paper which create brand image. It also creates awareness amongst the stakeholders about the environment as well as environment friendly business practices. But only private banks largely have been able to build such green banking image.
- ➤ Online banking and ATM facilities of SCBs and SDBs are very poor, BB need necessary steps for that regards.
- ➤ 100% banks have waste management policy.
- ➤ Most of Banks give to entrepreneur such as Tobacco cultivation and marketing, Bricks manufacturing organization that are destroying environment, if they collect certificate from Environmental Department.
- About 77% of the banking customer has no green Credit card.
- ➤ It is unbelievable that only 10% of the customer of this study know about Green reward checking accounts.
- ➤ 85% banker says that there is a green banking unit in their branch.
- A total amount of Taka 465.9 billion was disbursed during FY15 by 46 banks involved in green finance.
- All banks conducted environmental risk rating in FY15. The number of projects applicable for Environmental Due Diligence (EDD) during the year was 55881. Total amount of Taka 1500.1 billion disbursed in 39613 rated projects out of 47926 rated projects in FY15.
- > 55 banks out of 56 banks had online branches at the end of FY15 which stood at 68.1 percent at end of FY15 against total branches.

5.2 Recommendations

Bank may adopt properly environment friendly practices which ensure the efficient use of resources. Banks may take new initiatives and promote different green banking products as much as possible. Banking employee should consider the green banking initiatives as primary work. Banking sector is the backbone of the country. So it's important for the banking sector to recognize their responsibility as a global corporate citizen. So following strategies are important for the banking sector:

- ➤ The bank may start investment in low carbon producing technology and may develop new sustainable development programs to protect the environment.
- ➤ Bank may change their daily work through the paper less banking, online banking, mobile banking, mass-transportation system etc.
- ➤ Banks can organize training program about green banking to make their clients conscious regarding Green Banking as well as to introduce their Green Products and services therein.
- ➤ Bank may adopt go green technology that must reduce the carbon footprint from the environment.
- ➤ Bank employee may be given orientation on evaluation of green finance projects like renewable energy projects, clean water supply, bio-gas plants etc.

5.3 Conclusion

Bangladesh is one of the severely affected countries of global environmental pollution and most climate change vulnerable countries in the world. So, we need to protect our future generation, we need to take steps to keep the world habitable. Green banking practices is one of them. As banks indirectly contribute to environmental pollution through investing in different pollutant industries, we need to take steps against all the wrong doing. Bangladesh Bank which has the legal power to shape the behavior of the banks, it will have to force all the banks to implement green banking policy to curb its own environmental pollution, giving loans to environmentally friendly projects and reducing investment in environmentally harmful projects. Government should also encourage the general people about the green banking practices. The central bank should also monitor commercial banks whether they are practicing green banking or not. Government may also encourage the general people about the green banking practices. So, every bank has to contribute to green banking practices in Bangladesh.

5.4 Scope for Further Research

Here in this study I use only 20 bank executive opinions due to limitation of time, but here is a great scope to do research on this topic in a large scale by using data from various selected bank located all over the Bangladesh. In our country there are 56 Government and Non-Government Commercial bank, the researcher can use data from the entire bank to get a greater result of the study. On the other hand researcher can do study by base on Green Banking on the topic, may be A Commitment towards the Global Initiatives, A Comparative Analysis of Green Banking, An Evaluation of Green Banking Practices in Bangladesh etc.

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APPENDICES

Appendix-A

Questionnaire-1

Determination of Green Banking Practices & its Effects in Bangladesh; A study on Selected Commercial Bank Branches Located In Dinajpur & Nilphamari City.

An empirical analysis

Dear respondent,

I am the students of MBA in Marketing; Dept. of Marketing; Faculty of Post Graduation Studies; Hajee Mohammad Danesh Science and University (HSTU), Dinajpur. I would like to invite you to participate in a research study which aims at collecting data to determine **Green Banking Practices & its Effects** in Bangladesh. I ask you to fill it out with as much accuracy as possible. For your kind information, we are using 5 point like scale.

scale.						
Range	: 1= Stı	rongly Dis	sagree; 2= Disa	agree; 3=Neutral; 4	=Agree; 5=Stron	ngly Agree
And,	1=Y	Yes	2	=No		
*	Demo	graphic p	rofile of the res	spondents.		
	>	Name				
	>	Sex:	□Male	Female		
	>	Age:	20-30	31-40	41-50	51-above
	>	Designa	tion:			
	>	Name of	f the bank:			
	>	Location	n of the branch	:		
	>	Education	on Background	l:		
*	Projec	et paper:				
		Does Yes	your organiza	tion follow green b	oanking?	

Sl	Content	Strongly	Disagree	Neutral	Agree	Strongly
no		Disagree	_			Agree
1	Do you mean that every employee (Banker) of this bank know properly about Green Banking?	1	2	3	4	5
2	Have any Green Banking Unit in your bank?	1	2	3	4	5
3	Is Green Banking Policy of Bangladesh Bank followed in your bank?	1	2	3	4	5
4	Do you mean that current Green Banking Policy is productive to protecting environment?	1	2	3	4	5
5	Is any training needed about Green Banking for the employee of this bank?	1	2	3	4	5
6	Is loan given to entrepreneur without considering Green Banking?	1	2	3	4	5
7	Is loan given to entrepreneur, if they collect certificate from Environmental Department such an organization as Tobacco cultivation, Bricks manufacturing organization that must destroy environment?	1	2	3	4	5
8	Is any Green Banking seminar or campaign performed by your bank?	1	2	3	4	5
9	Do you mean that seminar, report and advertisement are required for providing information about Green Banking Policy of this bank to entrepreneur?	1	2	3	4	5
10	Is current environment risk fund Bangladesh Bank enough for procurement of environment destruction?	1	2	3	4	5
11	Does your organization follow green technology?	1	2	3	4	5
12	Does your organization support environmental sustainability vision?	1	2	3	4	5
13	Does your organization has waste management & pollution management?	1	2	3	4	5

Thank you for your cooperation.

Signature of the respondent
Mobile No
E-mail (If any):

Questionnaire-2

Determination of Green Banking Practices & its Effects in Bangladesh; A study on Selected Commercial Bank Branches Located In Dinajpur & Nilphamari City.:

An empirical analysis

□ Yes

Dear respondent,

I am the students of MBA in Marketing; Dept. of Marketing; Faculty of Post Graduation Studies; Hajee Mohammad Danesh Science and University (HSTU), Dinajpur. I would like to invite you to participate in a research study which aims at collecting data to determine **Green Banking Practices & its Effects** in Bangladesh. I ask you to fill it out with as much accuracy as possible. The objective of this research questionnaire is to find out your (respondent) experience about the Customer Satisfaction on Environmental Friendly Banking "Green Banking". Your personal information and response will be kept highly confidential according to the Data Protection Law, 2009 and it will be used only for educational purpose. . For your kind information, we are using 2 point like scale,

1=Yes and 2=NoDemographic profile of the respondents. Name..... ☐ Male Sex: ☐ Female ➤ Age: \square 20-30 31-40 □ 41-50 □ 51-above > Profession: □ Student Teacher □Job holder ☐ House wife ☐ Business □ Politician □ Others **Education:** \square S.S.C ☐ H.S.C ☐ Graduate Post Graduate ➤ Income: □Below-10000□10000-20000□ 20000-30000□ 30000-Above Name of the A/C holding bank: Location of the branch: Project paper: ➤ Do you have any A/C in a bank that's branch located in Dinajpur/Nilphamari?

☐ No

Sl.	Content	Yes	No
no			
1	Do you have any Account in the Bank that provide green banking service?	1	2
2	What do you think green banking undertake proactive measures to protect environment?	1	2
3	Do you know green mortgage offers better rates or terms for energy efficient houses?	1	2
4	Do you have a green Credit card?	1	2
5	Do you know the cardholders can earn rewards or points which contribute to eco-friendly charitable organizations?	1	2
6	Do you have Green reward checking accounts?	1	2
7	Is it helpful for Green banking to use online banking instead of branch banking?	1	2
8	Do you think Green banking system is a paperless banking system?	1	2
9	Do you know about the Climate risk fund for changing climate?	1	2
10	What do you think Green banking attaches more importance to environmental factors than normal banking?	1	2

Thank you for your cooperation.
Signature of the respondent
Mobile No
E-mail (If any):

Appendix-B

Descriptive Statistics of the Salient Factors (Bank)

	N	Minimum	Maximum	Mean	Std. Deviation
Knowledge	20	3.00	4.00	3.9500	.22361
Green Banking Unit	20	4.00	5.00	4.2500	.44426
Green Banking Policy	20	4.00	5.00	4.2000	.41039
Protect Environment	20	2.00	4.00	3.8000	.52315
Green Banking Training	20	2.00	5.00	3.7000	.65695
Green Loan	20	1.00	2.00	1.3500	.48936
Environment Certificate	20	4.00	4.00	4.0000	.00000
Green Banking Seminar	20	3.00	5.00	3.5000	.60698
Green Advertisement	20	3.00	4.00	3.8000	.41039
Environment Risk Fund	20	2.00	4.00	3.4000	.59824
Green Technology	20	4.00	5.00	4.2500	.44426
Environmental	20	4.00	5.00	4.1500	.36635
Sustainability Vision					
Waste Management	20	4.00	5.00	4.1500	.36635
Valid N (list wise)	20				

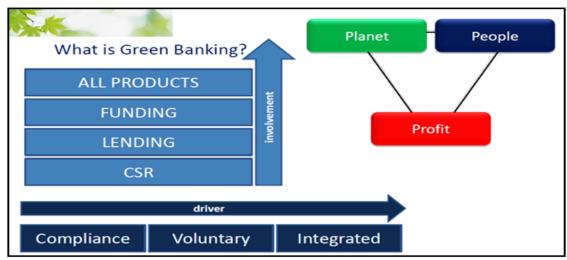
Source: Field Survey, 2016.

Descriptive Statistics of the Salient Factors (Banking Consumer)

	N	Minimum	Maximum	Mean	Std. Deviation
Green Account	30	1.00	2.00	1.2667	.44978
Proactive Measure to	30	1.00	2.00	1.1333	.34575
Protect Environment					
Green Card	30	1.00	2.00	1.2333	.43018
Eco Friendly Contribution	30	1.00	2.00	1.7667	.43018
Green Mortgage	30	1.00	2.00	1.6000	.49827
Green Reward	30	1.00	2.00	1.9000	.30513
Online Banking	30	1.00	2.00	1.0333	.18257
Paperless Banking	30	1.00	2.00	1.2667	.44978
Climate Risk Fund	30	1.00	2.00	1.3333	.47946
Normal Banking	30	1.00	2.00	1.0667	.25371
Valid N (list wise)	30				

Source: Field Survey, 2016.

The Coverage of Green Banking



Adopted from Presentation of Setijawan E. (2014)

More Resources for Green Banking Information



























EBSCO, Index Copernicus, Ulrich's Periodicals Directory, Journal TOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC World Cat, Universe Digital Library, New Jour, Google Scholar.