Green Banking Initiative in India: A Study on its Practices, Performance and Stakeholder Perception

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CHAPTER 7

FINDINGS AND CONCLUSION

7.1 Introduction

This chapter describes major findings of various objectives of this study. Additionally, the study's conclusion is presented in this chapter, along with few suggestions derived from the findings of the study. The chapter is divided into three parts, the first part (Section 7.1) discuses the introduction to the chapter; the second Section (Section 7.2) states the key findings. The third part of the chapter (Section 7.3) states the conclusion, including future research possibilities for the banking community.

7.2 Major Findings

In this study, 3 objectives were framed. The 1st one analyzed Green Banking Practices and Green Banking Performance of Indian banks; the 2nd objective analyzed association between Green Banking Performance and banks' corporate characteristics. 3rd objective explored the perception of selected stakeholders on Green Banking. The summary of the major findings based are stated below:

7.2.1 Green Banking Performance Evaluation Index

In this study, a tool has been developed and proposed to evaluate the banks' Green Performance which is named as Green Banking Performance Evaluation Index, and is denoted as GBPEI. The Index was proposed considering the fact that there exists no single tool for measuring the Green Performance of banks across the globe.

i. *Variables, Sub-Dimensions and Dimensions*: The index includes 99 variables, 14 sub-dimensions and 6 dimensions. The variables were clubbed together to form sub-dimensions, and the sub-dimension were clubbed together to form the dimensions. The 6 dimensions of the GBPEI are: Accounting and Finance; Marketing, Awards, and Capacity Building; Green Human Resource Management; Mode of operations; Planning, Policies, and Supervision; and Risk Management. The 14 Sub-Dimensions of GBPEI are: Green Finance and Investments; Accounting of Green Initiatives; Disclosure and Reporting Practices; Green marketing and Green CSR; Capacity Building of Stakeholders; Green Awards and Recognition; 'Procurement and Internalization'; Office for Green Banking; Paperless Mode of Operations; Green Building and Infrastructure; Resource Usage and Measurement; Planning and Policies; Green Supervision and Inspection; and Environmental Risk Management.

ii. *Index Scoring*: The index was scored using Equal Weighted Scoring Approach. The presence of an item in the index is scored as 1 and the absence of an item is scored as 0. Thus, the index has a total score of 99, which is equal to the total number of variables in the index. A bank in a year can get a maximum score of 99 and a minimum score of 0 on the basis of Green Banking information present in the annual and standalone reports. Thus, the Green Banking Performance of Indian banks in this study are measured using the Green Banking Performance Evaluation Index.

7.2.2 Green Banking Practices

The most popular Green Banking practices among Indian banks are those which they adopt in their day to day operations. Green Banking activities that involves electronic and digital banking services, establishing green branches, using renewable sources of energy and making optimum utilization of resources are the most popular practices adopted by Indian banks. The least popular Green Banking practices are those that are related to managing risks arising out of environmental activities.

7.2.3 Green Banking Performance of Selected Indian Banks

The Green Banking Performance of the scheduled commercial banks was analyzed for 10 years starting from 2009-10 to 2018-19 using the GBPEI. The banks were scored and ranked based on the availability of Green Banking information in their annual reports and standalone reports. Thereafter, Green Banking Scorecards were prepared for the Indian Banking Community as a whole.

i. *Year-Wise Highest and Lowest Scorers*: It is found that the highest scorers in individual years were Private Banks and in majority of the years the lowest scorers were also the Private Banks. The highest and lowest scorers year-wise are depicted below in Table 7.1:

Table 7.1: Highest and Lowest Scorer Banks

Years	Highest Scorer	Lowest Scorer
2009-2010	ICICI Bank	Nainital Bank
2010-2011	IndusInd Bank	Karnataka Bank
2011-2012	IndusInd Bank	Karnataka Bank
2012-2013	IndusInd Bank YES Bank	Lakshmi Vilas Bank Punjab and Sind Bank

2013-2014	HDFC Bank	Punjab and Sind Bank
2014-2015	YES Bank	Lakshmi Vilas Bank
2015-2016	HDFC Bank	Oriental Bank of Commerce
2016-2017	YES Bank	Dhanlaxmi Bank, Lakshmi Vilas Bank
2017-2018	YES Bank	Nainital Bank
2018-2019	YES Bank	Punjab and Sind Bank Dhanlaxmi Bank

Source: Compiled by researcher

Few of the banks have always outperformed the industry average throughout the 10 years, which are: State Bank of India, HDFC Bank, ICICI Bank, IndusInd Bank, Kotak Mahindra Bank and YES Bank. All these banks can be considered as good performers as they have outperformed industry average for a significant number of years.

ii. *Growth in Green Banking Performance*: The average GBPEI was 10.675 in 2009-10 and 31.63 in 2018-2019. The Green Banking Performance has seen a gradual increase over the 10 years; however significant increase were observed in the years 2012-2013 and 2016-2017. The highest annual growth rate was observed in those two years in Green Banking Performance. Also, over the 10 year period the lowest GBPEI score achieved by any bank is 1 and the maximum GBPEI score achieved by any bank is 71. This reflects the variation in the Green Banking Performance amongst the various Indian banks.

iii. *SEBI Regulation and Green Banking Performance*: The sharp increase in GBPEI in 2012-2013 and 2016-2017 may be due to the introduction of SEBI regulation on Business Responsibility Report (BRR) which required corporations to report on their social and environmental activities every year. The SEBI BRR regulation was introduced in 2012-13 and was made mandatory for top 100 companies based on market capitalization. The SEBI BRR regulation was made mandatory for the top 500 companies from the year 2015-2016. Further, the results of the One-Way Anova test confirms that there exists significant difference in the GBPEI scores over the three phases {1st phase (2009-10 to 2011-12): no regulation, 2nd phase (2012-13 to 2014-15): BRR regulation mandatory for 100 companies, 3rd phase (2015-16 to 2018-19): BRR regulation mandatory for 500 companies) of SEBI BRR Regulation.

7.2.4 Green Performance of Public and Private Sector Banks

i. *Across Sector Performance*: Green Banking Performance of Private and Public Sector Banks have seen a gradual growth over the years. However, in the year 2016-2017, the Public Sector outperformed Private Sector Banks by a major margin in their Green Banking Performance. Annual Growth rate in Public Sector Banks experienced negative annual growth rate in 3 of the years and also, it experienced significant positive growth rate in 2012-13 and 2016-17. However, as compared to Public Sector, Private Sector experienced moderate growth rate over the 10 years. The annual growth depicted there was more volatility in performance of Public Sector Banks rather than in Private Sector Banks. When the sectors are compared with each other, overall the performance of the Public Sector was superior to that of the Private Sector in 7 years out of 10 years. Only in 3 years, namely 2011-12, 2015-16, and 2018-19, Private Sector Banks performed better than the Public Sector Banks. In the last ten years, the Public Sector has scored on average higher than the Private Sector. Amongst both the sectors, the top performer is YES Bank. Following YES Bank is IndusInd Bank and HDFC Bank. Lowest performers amongst both the sectors are Nainital Bank and Lakshmi Vilas Bank. Independent t-test results show that there is no substantial difference in the Green Banking Performance of Public Sector Banks and Private Sector Banks.

ii. *Within Sector Performance*: Within Public Banks, SBI is the top performer with the highest GBPEI in the last 10 years, followed by Punjab National Bank, and Bank of Baroda. The lowest performers amongst the Public Sector Banks are Punjab and Sind Bank, followed by Dena Bank and IDBI Bank. Within the Private Sector Banks, YES Bank is the top performer, followed by IndusInd Bank and HDFC Bank. The lowest performers amongst the Private Sector Banks are Nainital Bank, followed by Lakshmi Vilas Bank. The third last rank amongst the Private Sector Banks is secured by Dhanlaxmi Bank.

7.2.5 Green Banking Performance and Corporate Characteristics

The association between Green Banking Performance and corporate characteristics of banks were analyzed in objective 2. The Green Banking Performance derived from objective 1 is used in objective 2, to find the impact of corporate characteristics of banks on Green Banking Performance. 6 corporate characteristics of banks were used, namely

age of the bank, bank size, non-performing assets, board size, women director and return on assets (ROA).

i. *Method Used*: The dataset in this study is Panel Data, comprising of values for different time periods across different entities (in this case, banks). Thus, Panel Data Regression was employed for conducting regression analysis. All the three models of Panel Data Regression were employed, namely Pooled OLS Regression, Fixed Effect Model and Random Effect Model. The assumptions of each of the models were tested. Testing of assumptions has revealed that the use of Fixed Effect Model is appropriate for the dataset. Thus, the final result for this objective is derived using the Fixed Effect Model. Panel Data Regression was conducted between the independent variables, which are the 6 corporate characteristics mentioned above, and the dependent variable, which is the Green Banking Performance measured with the help of GBPEI in Objective 1.

ii. *Dependent and Independent Variables*: The mean GBPEI has increased over the years starting with mean GBPEI of 10.675 in 2009-10 and mean GBPEI of 31.63 in 2018-19. Descriptive statistics reveal that the average bank size is 2651375494.13; the average size of board is 10.72. The mean ROA is 0.55% and mean NPA is 2.96%. Maximum number of women directors on board reported over the 10 year period across the 40 banks is 3. The mean age of banks is 79.74 years. The age of the sample banks range from 6 years to 154 years.

iii. *Relationship Derived*: Fixed Effect Model (FEM) reveals that bank size and age of the bank are good predictors of Green Banking Performance as the Sig value (probability value) for both the variables are less than 0.05. The value of R-Squared as per FEM is 0.8237, thus the model explains 82.37% of the variation in the dependent variable. The F-Statistic revealed by the Fixed Effect Model is less than 0.05, thus implying that the combined effect of the independent variables on dependent variable is significant. The model derived from the analysis is:

$$\text{GBPEI} = -173.8703 + 4.66\text{BankSize} + 0.61\text{ROA} + 0.15\text{NPA} - 0.15\text{BRDSIZE} - 0.964\text{WOMNDIR} + 2.44\text{BANKAGE} + \varepsilon_{it}$$

The model shows that Bank Size, ROA, NPA and Age of the bank positively impacts GBPEI, however size of board and women directors on board negatively impacts the GBPEI. From the model it can be stated that rise in size of bank by 1

unit will cause GBPEI to rise by 4.66 units, keeping other factors constant. An increase in ROA by 1 unit increases the GBPEI by 0.61 units, keeping other factors constant. The findings of the FEM state that the increase in NPA by 1 unit increases GBPEI by 0.15 units, keeping other factors constant. If there is an increase in board size by 1 unit, GBPEI will diminish by 0.15 units, keeping other factors constant. Additionally, if number of women director rises by 1 unit, GBPEI will reduce by 0.96 units, keeping other factors constant. Last, if there is 1 unit increase in age of a bank, GBPEI will rise by 2.44 units, keeping other factors constant.

7.2.6 Stakeholders' Perception on Green Banking

The last objective explored the perception of selected stakeholders on Green Banking in Delhi and Mumbai. Both internal stakeholders (bankers) and external stakeholders (customers) were targeted for the study. Below is a discussion of the key findings of this objective:

i. *Awareness and Usage*: Approximately stakeholders are aware of 8 Green Banking products and services (GBPS) and have used 6 GBPS. There exist differences in usage and awareness level of GBPS. There are stakeholders who have reported that they are aware of none and have used none of the GBPS. Also, there are stakeholders who have stated that they are aware and have used all the stated 16 Green Banking products and services. Bankers and customers have different levels of awareness and usage of GBPS.

ii. *Benefits and Difficulties of Green Banking Products and Services*: Benefits and difficulties of GBPS were explored across different demographic variables. Mann-Whitney U Test reflects the existing difference in opinion between customers and bankers on the various benefits of GBPS, and on the various difficulties faced during adoption of GBPS. For the other demographic variables (gender, marital status and bank category) no significant difference in perception exists on benefits and difficulties of GBPS.

iii. *Purposes of Green Banking Disclosures (GBD)*: Customers and bankers have major difference in perception on the following purposes of GBD: GBD makes customers aware of environmental issues, GBD increases customer base, GBD is done for meeting legal obligations, GBD is done for satisfying environmental lobby groups, GBD improves bank's reputation, GBD contributes to the

environment, GBD conforms to social values and GBD provides a true picture of bank's performance. Male and female stakeholders differed on one purpose of GBD, which is GBD helps to gain customers' confidence. No major difference exists between married and unmarried stakeholders about their perception on purposes of Green Banking Disclosures. Additionally, perception difference do not exists between Public Sector and Private Sector Bank stakeholders about purposes of Green Banking Disclosures.

iv.   ***Benefits of Green Banking Disclosures (GBD)***: 93.2% of stakeholders agreed that Green Banking Disclosures enhance knowledge on Green Banking. 88.73% of the stakeholders agreed that GBD help to learn new technologies. 89% agreed that GBD contribute towards environment. About 85% of the stakeholders believed that the bank's prospects are improved by its disclosures on Green Banking. 83% of the total stakeholders agreed that GBD give new insights on environmental problems. 75% of the stakeholders agreed that disclosures on Green Banking contribute to banks' long-term sustainability.

Male and female stakeholders differ in their perception about the following benefits of Green Banking Disclosures: Green Banking Disclosures enhances knowledge on Green Banking, Green Banking Disclosures helps to handle new technologies, and Green Banking Disclosures gives a positive impression of bank's prospects. Also, bankers and customers differ on the following benefits of Green Banking Disclosures: Green Banking Disclosures contribute towards the environment, Green Banking Disclosures gives a positive impression of bank's prospects and Green Banking Disclosures help in long term sustainability of banks. No significant difference exists in the perception of married and unmarried stakeholders, and in between public and private bank stakeholders regarding the benefits of Green Banking Disclosures

v.   ***Qualities of GBD***: Qualities of Green Banking Disclosures is measured using 8 sub-variables, which are tested across demographic variables. It has been observed that opinions on the value of Green Banking Disclosures vary across customers and bankers, as well as between public and private bank stakeholders.

vi.   ***Satisfaction with Green Banking Disclosures***: Satisfaction with quality and quantity of Green Banking Disclosures is examined in this study. It is found that 67.7% of the stakeholders are satisfied with quality of Green Banking disclosures, and 67% of the stakeholders are satisfied with the quantity of Green

Banking Disclosures. Significant difference in perception is observed between the customers and bankers; and amongst the public bank stakeholders and private bank stakeholders with regards to satisfaction with quality and quantity of Green Banking Disclosures.

vii. *Sources of Information*: Frequency Analysis of the various sources of information on Green Banking listed to the stakeholders revealed that bank branch is the most common source of receiving information on Green Banking, followed by online sources, and ATM and social media. Amongst Preferred sources, social media is the most preferred source for receiving information on Green Banking, followed by bank branch and online sources.

viii. *Location of Green Banking Information*: Amongst the three locations stated for receiving information on Green Banking, website is the most preferred location (62.3% of the total responses), followed by standalone reports. Annual reports are least preferred by the stakeholders (15.6% of the total responses). Results of the Chi-Square test reveals that preference for location of Green Banking information is related to the category of stakeholder that is whether they are bankers or customers.

ix. *Form of Information*: Amongst the three formats (qualitative, quantitative, and both qualitative and quantitative) of receiving information on Green Banking mentioned to the stakeholders, 50% of the stakeholders stated that they receive information in both the formats, and 43% receive in qualitative format. Majority of the respondents prefer to receive information in both the formats (quantitative and qualitative). Quantitative information is least popular amongst the stakeholders. Encountered form of reporting and preferred form of reporting are related to stakeholder category that is whether they are customers or bankers.

7.3 Conclusion

Environment is an important issue in all types of business, including banks. Due to changes occurring in the financial and environmental front, businesses are re-shaping their objectives and manner of operations to become more socially responsible. Green Banking requires a bank to adopt environment-friendly strategies. It helps to adopt an environment-friendly manner of operations and also makes a bank invest in environment-friendly businesses. There have been rise in the popularity of the concept amongst the researchers, academicians and policy makers. By going green, banks help

nations to deal with climate change and maintain a fine balance between economic and environmental growth.

This research focussed on understanding Green Banking from three different perspectives, first the popular Green Banking practices of Indian banks, second the Green Performances of Indian banks and third stakeholders' perspective on Green Banking. The current dearth of studies on green practices and performances of banks is due to lack of a standard tool for measuring Green Banking Performance. Thus, a Green Banking Performance Evaluation Index was developed that can be used to measure Green Banking Performance of banks of different nature and of banks residing in different nations. This study evaluated scheduled commercial banks' Green Banking Practices and Performance for 10 years starting from 2009-2010 to 2018-2019 using the Green Banking Performance Evaluation Index. An attempt was made to measure and compare Green Banking Performance of Public Sector Banks and Private Sector Banks over the time period. This formed the first objective of the research which was analyzed with the help of Independent t-test and One-Way Anova, line diagram, percentages and tables. The second objective focussed on analyzing association between Green Performance of banks and financial and non-financial characteristics of banks. 3 financial characteristics namely return on assets, bank size and NPA were taken into consideration. 3 non-financial characteristics that were taken into considerations include board size, number of women directors and age of the bank. For the fulfilment of the second objective, Panel Data Regression was used. The third and the last objective of the study aimed to explore selected stakeholders' perception on Green Banking. Stakeholders of Delhi and Mumbai were targeted for the third objective and both internal (bankers) and external (customers) stakeholders were targeted for this objective. The third objective's findings were derived using the Chi-Square test, Independent Sample t-test, and Mann-Whitney U test. The contributions made by this study are discussed in two parts below, namely theoretical contributions and practical contributions.

7.3.1 Theoretical Contributions of the Study

This study makes important contributions to the Green Banking literature. First, from the review of literature, it is observed that this study is one of the earliest studies that proposed an index for exploring Green Banking Practices and for measuring Green Banking Performance. The Green Banking Performance Evaluation Index proposed in

the study has 99 variables, 14 sub-dimensions, and 6 dimensions. Banks can be scored and ranked based on their Green Banking Performance using this index. A single bank can thus get a maximum score of 99 in a particular year. This index fills a vast research gap in Green Banking by providing a tool for measuring Green Banking Performance.

No study could be found that has explored popular Green Banking practices and performances of Indian banks. This study explored this dimension and concluded that electronic / digital banking, green infrastructure, optimum utilization of resources and use of renewable energy are the most popular Green Banking practices among Indian banks. There has been research on measuring Corporate Social Responsibility performance of banks using various indices. However, studies measuring Green Banking Performance have been scarce as has been pointed out by Sarma and Roy (2021). Thus, this study explored and analyzed Green Banking Performance of Indian Public Sector Banks and Private Sector Banks using GBPEI. This study points out that overall Public Sector outperformed Private Sector. However, at individual level, based on the Green Banking scorecard prepared for the Indian Banks, it is found that the top performers are private banks, namely YES Bank, IndusInd and HDFC Bank. Thus, it means that overall Public Sector scored more than Private Sector, but at individual level the top performers are the Private Sector Banks.

This research employed Panel Data Regression to study the association between Green Banking Performance and corporate characteristics of banks. The study pointed out that that bank size and age of the bank are good predictors of Green Banking Performance. The results revealed that bank size, ROA, NPA and age of the bank positively impact Green Banking Performance; however size of board and count of women directors negatively impact the Green Banking Performance. It can be concluded from the above analysis that large banks with higher amount of bank assets will show better Green Banking Performance and vice versa. This also stands justified because banks with higher amount of assets would have the capacity to incorporate activities which are socially beneficial like environmental protection. For a smaller bank, it would be difficult to allocate funds for activities which are not legally mandatory. Also, older banks will be at an advantageous position to allocate funds for environmental activities considering the experience and expertise they have gained over the years. Comparatively newer banks will find it difficult to diversify and manage activities which are not related to their core banking activities.

No literature could be found that has covered stakeholders' perception on Green Banking Disclosures (GBD). This study specially focussed on stakeholders' perception about GBD. Findings stated that the most common source for receiving information on Green Banking is bank branch. However stakeholders prefer social media the most for receiving information on Green Banking. Stakeholders prefer websites rather than annual reports and standalone reports for receiving information on Green Banking. Another key finding is that stakeholders prefer to receive information on Green Banking in both qualitative and quantitative format. Thus, the banking community of India should try to disseminate information on Green Banking in social media and websites. They should provide information in both quantitative and qualitative format. Also, the study pointed out that customers and bankers differ in their perception of various issues related to Green Banking, which again calls for the attention of the banking community to address the difference in perception.

This research is in response to the dearth of four dimensional studies on Green Banking as has been pointed out by Sarma and Roy (2021) in their study. Further, this study has provided an overall view of Green Banking in India starting from the past and present Green performance of Indian banks to the perception of stakeholders on Green Banking. This study can act as a reference point for researchers and policymakers in taking initiatives on Green Banking in the future.

7.3.2 Practical Implications of the Study

The present study's practical implications are wide ranging. The research has clearly stated the need of a globally accepted tool to measure Green Banking Performance. So, Green Banking Performance Evaluation Index proposed in this study can be used by banks of different nature and located in different geographical regions. In fact, with the help of this index, nations can individually prepare Green Banking Performance Evaluation Scorecard for banks. Along with that, international organisations may take up initiative to prepare a Global Green Banking Performance Evaluation Scorecard to evaluate banks across the globe. The index will become the base for evaluating the progress of banks on Green Banking, thereby providing the financial community with important insights on Green Banking.

For the banking industry, this study offers significant inputs about Green Practices and Performance of Indian banks. This study will act as a guide for the Indian banks to

diversify their Green Banking activities and adopt more Green Banking practices in the direction of risk management. This study will motivate the Indian banks with lower ranks as per the Green Banking Performance Evaluation Index to take up more environmental initiatives and thus improve their performance. Also, the study will inspire the top rankers to continue contributing on the environmental front so as to maintain their high rank. Additionally, the findings of this study can be used by banks to know about the variables that impact the Green Performance of banks.

The study will also benefit the regulators of banking sector as they may frame policies in future in the field of Green Banking. In this regard the current Green Banking Performance of various Indian banks can be taken into account.

Also, the study will guide and motivate the banks to revise their strategies with regards to communication of Green Banking information. The banks can use the findings to choose the appropriate source, medium and format for disseminating information on Green Banking. Also, the study demands the attention of the banking community of India to reduce the information asymmetry between customers and bankers.

Based on the findings of the study, the following observations are made:

i. **Bringing Uniformity and Reducing Disparity in Performance**: It is observed that there is significant disparity amongst the banks in their Green Banking Performance. There are banks that have scored 1, and there are banks that have scored 71 in the GBPEI, showing significant disparity in Green Banking Performance. Within the private sector, there are banks which have been the highest scorers amongst all the banks under sample and there are certain banks that have been consistently performing low on Green Banking. Thus, attention is needed from the regulators of banks to bring uniformity in Green Banking Performance. This can be achieved by introducing guidelines that would compel banks to work on the environmental front.

ii. **Phase-Wise Implementation of Green Banking**: It has been pointed out that banks with lesser amount of assets and newer banks are able to perform less on the Green Banking front. Considering that, phase-wise implementation of Green Banking is the need of the hour for Indian banks. Following model of Bangladesh, wherein the banks of Bangladesh have been asked to comply with Green Banking guidelines in a phased manner, Indian financial regulators too

need to adopt the same strategy. This would make it easier for the newly formed banks and banks with lesser amount of assets to put Green Banking initiatives into practice. This strategy would help to compare banks of similar size and age on their environmental performance.

iii. **Mandatory Legislation**: Indian banks have only the SEBI BRR regulation which requires them to report on their social and environmental activities. However, no legislation exists that compels the Indian banks to perform or take initiatives towards the environment. The banks may or may not choose to do anything for the environment in a particular year. Thus, the need of a mandatory legislation that requires banks to take a minimum level of environmental initiatives in a particular year is the need of the hour.

iv. **Management of Board Members**: It is observed that Green Banking Performance is negatively affected by size of board and count of female directors. With increase in size of the Board and women directors on board, the Green Banking Performance decreases. This may be due to differences of opinion that exist among the board members. Hence, banks might decide on an optimum number of board members and women directors to strike a fine balance between Green Banking Performance and good corporate governance. By optimum number of board members, it means that the numbers should such that it gives due consideration to requirements of corporate governance in an organization but also does not have more than the statutory requirement as it might impact Green Banking Performance negatively. In a similar way, optimum number of women directors means that the numbers should such that it gives due consideration to gender equality in an organization but may not appoint more than what is statutorily required in the law.

v. **Adoption of Preferred Communication Media**: It is found that stakeholders prefer to receive information on Green Banking through certain specific sources and in some specific format. Indian banks should try to disseminate information on Green Banking through social media and bank branch. Banks should disclose more information on their websites and information on Green Banking should be provided to the stakeholders in both quantitative and qualitative format. Banks should try to provide Green Banking information in values, numbers and in sentences and pictures.

vi. **Uniformity amongst Internal and External Stakeholders:** The results of the study show that customers and bankers differ significantly in their perception of all issues of Green Banking that were considered in this study. They hold different perception on awareness, usage level, benefits and difficulties of Green Banking, purposes and benefits of GBD, quality and satisfaction with Green Banking Disclosures (GBD). Also the forms of reporting and location preference for Green Banking information differ amongst stakeholder category that is customers and bankers. Steps need to be taken by the banking community so as to reduce this difference in perception as the difference would impede the growth of Green Banking amongst the different stakeholder groups.

7.3.3 Scope for Future Studies

This study has opened new opportunities for future research studies on Green Banking. The following areas are suggested for conducting future researches on Green Banking:

i. Volumetric Method of Content Analysis remains to be explored. Volumetric Method assesses characteristics and volume of Green Banking Disclosures in reports of banks. In the future, studies that assess Green Banking Performance using the volumetric method can be taken up by the researchers.

ii. Future research studies on Green Banking Performance using both the Volumetric Method and Index Method can be taken up. Such a study would give an exhaustive picture of Green Banking Performance and would reflect upon the differences and similarities in Green Banking Performance across both the methods.

iii. Green Banking Performance of other banks like RRB (Regional Rural Banks), Foreign Banks, Payment Banks and Small Finance Banks, Local Area Banks can be explored in future studies. Comparative study on Green Performance of the above mentioned categories of banks can be explored. This would give an exhaustive picture of Green Banking Performance of the Indian Banking community. Also, this would help in assessing the relative performance of various categories of banks.

iv. Cross-Country analysis can be done by comparing Green Banking Performance of Indian banks and banks of other countries using the GBPEI.

v. Also, researchers in the future can modify the index by adopting weighted scoring approach and assigning different weights to the variables in the index based on the interaction with stakeholders.

vi. In future, new research may be taken up for modifying the current proposed index 'GBPEI' by taking stakeholders' perception into consideration.

vii. A study analyzing the relationship between financial characteristics of banks (not covered in this study) and their Green Banking Performance can be taken up in future.

viii. A study analyzing the relationship between non-financial characteristics of banks (not covered in this study) and their Green Banking Performance can be explored.

ix. A comparative study on stakeholders' perception of Green Banking in both urban and rural areas of India can be taken up in future.

x. A study can be undertaken on Green Banking by capturing perception of different stakeholders of banks like media, Government, Non-Government Organisation etc.