Green Banking Disclosures: Are they Beneficial and Important to the Stakeholders?

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Abstract  
The study attempts to explore stakeholders’ perceptions on the importance and benefits of Green Banking disclosures. The study also analyzes the association of demographic variables with the importance and benefits of Green Banking disclosures. The data for the study is collected from 630 bankers and customers using a structured questionnaire. Demographic variables used for the study are gender, marital status, bank categories (public or private), and nature of stakeholder (banker or customer). Statistical tools applied for analysis are Frequency Analysis, Cross-Tabulation, and Mann-Whitney U Test. The study reveals that the majority of the stakeholders (92%) agreed that it is important to disclose Green Banking activities, 94% of the stakeholders agreed that it is important to communicate Green practices, and 79% of the stakeholders agreed that Green Banking Disclosures are important for the social image of a bank. Mann-Whitney U Test reveals that Bankers and Customers differ significantly in their perception towards the importance of Green Banking disclosures. The study additionally reveals that majority of the stakeholders agreed on the various benefits of Green Banking disclosures. The results of the Mann-Whitney U Test tell that stakeholders of different gender differ in perception regarding the following benefits of Green Banking disclosures: enhancement of knowledge on Green Banking, helps to handle new technologies, and gives a positive impression of bank’s prospects. Stakeholders of different nature (banker and customer) differ in their perception towards the following benefits of Green Banking disclosures, namely: Green Banking disclosures contribute towards the environment, Green Banking disclosures gives a positive impression of bank’s prospects, and Green Banking disclosures helps in long term sustainability of banks. This study will help the banking community to understand the need to disclose their non-financial activities (environmental activities) to both their internal and external stakeholders.

Keywords: Green Banking, Green Banking Disclosures, Stakeholders, Importance, Benefits, Mann-Whitney U Test.

Introduction  
With continuous economic development, human beings have compromised with the natural environment (Sarma & Roy, 2021). The continuous unfortunate degradation of the environment, wherein every species, every plant, and every unit of it are struggling to survive, has drawn under its ambit the banking community to
contribute their portion towards it. Banks are now not only measured by their financial performance but also how they are discharging their responsibilities towards the environment. Green Banking is a concept that embraces all activities and initiatives that banks are undertaking to protect the natural environment. Green Banking helps a bank to discharge its Corporate Social Responsibility in the form of different environmental activities. It tries to include environmental consciousness as part of organizational culture (Infrastructure, Housing & SME Finance Department, 2017).

Penetration of a new concept like Green Banking amongst the stakeholders requires proper dissemination of information. It is important to know the stakeholders’ viewpoint on disclosure of Green activities of banks. Green Banking disclosures mean how banks are disseminating or sharing information about their Green (environmental) activities to their stakeholders. In this direction, this study attempts to explore two dimensions of Green Banking disclosures. The first it tries to explore stakeholders’ perception of the importance of Green Banking disclosures and secondly it tries to explore the benefits of Green Banking disclosures to the stakeholders. The study also analyzes the association of demographic variables with the importance and benefits of Green Banking disclosures.

Review of Literature

This section discusses the past literatures on Green Banking in India. Shayana, Raj, & K (2017) studied the problems and prospects of 100 respondents in Karnataka. The authors concluded that there is a lack of awareness about the concept of Green Banking amongst the stakeholders. Ramya (2017) measured the service quality of Green Banking using the SERQUAL model. The author collected data from 300 stakeholders in the Tiruchirappalli District in Tamil Nadu. The author concluded that there exists no significant difference in the opinion of stakeholders of different gender about Green Banking products. Krishnan (2018) studied stakeholders’ perceptions in Chennai on Green Banking. The author studied 265 respondents and concluded that customers’ attitude towards Green Banking is positive, however, the awareness level is still low amongst the customers. Sakthikumar (2018) studied the perception of 125 stakeholders of Public Sector banks in Tirupattur Town of Vellore District. The authors concluded that that debit card is a popular instrument of Green Banking amongst the stakeholders as around 98.4% of the customers use it for various purposes. Nath, Goel, & Singhal (2017) proposed a model by connecting the Technology Acceptance Model with environmental sustainability. The author identified key factors that influence acceptance of Green Banking practices, which are perceived usefulness, perceived ease of use, intention to adopt Green Banking practices, and attitude towards Green Banking. Raj & Rajan (2017) studied the initiatives taken by the State Bank of India and customers’ perception towards Green Banking. The authors found no significant relationship between gender and understanding of the concept Green Banking. Sudhalakshmi & Chinnadorai (2014) studied the various problems faced by the stakeholders in adopting Green Banking. The authors found that technical difficulties and lack of education are the main factors that are causing difficulties amongst the stakeholders. Jatana & Jain (2016) studied the awareness level of 160 customers in selected Public and Private banks in Rajasthan.

Authors opined that customers of SBI and ICICI bank are highly aware of Green Banking, and amongst the Green Banking products, Online Banking is the most popular one amongst the Customers.

Hence, it is seen that none of the literatures have captured stakeholders’ perception on Green Banking Disclosure. Thus, an attempt is made in this study to capture this aspect of Green Banking.
Objectives
The following are the objectives of the study:
• To analyze the importance of Green Banking disclosures.
• To explore the association between demographic variables with the Importance of Green Banking Disclosures.
• To analyze the benefits of Green Banking disclosures.
• To find out the association of demographic variables with the benefits of Green Banking disclosures.

Methods and Data
This section describes the research methods opted for the study. Descriptive research design is used in the study. The study is based on primary data. Primary data is collected from both internal and external stakeholders that are employees and customers of a bank respectively. Targeting both internal and external stakeholders will help us to know if their perceptions on Green Banking disclosures are the same or it varies. The data was collected using a structured questionnaire. A total of sample 630 is collected for the study. Stakeholders of Public Sector Banks and Private Sector Banks of India are targeted for the study. Green Banking requires the adoption of modern banking technologies like digital and electronic banking. As such, people in urban areas are more likely to be aware of such electronic and digital banking products and services. Hence, this study focuses on stakeholders of the two cities with the highest urban population in India which are Delhi and Mumbai (Census, 2011). The division of the sample collected is shown below in Figure 1. The objectives of the study are analyzed using both descriptive and inferential statistical techniques. The methods and data adopted for the study are depicted below in Figure 1:

Importance of Green Banking Disclosures
This section analyzes stakeholders’ perception on the Importance of Green Banking disclosures using Frequency Analysis. Three items are used to measure the Importance of Green Banking disclosures. Results of Frequency Analysis are stated below:

| Items of Importance of Green Banking Disclosures | Frequency | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Total |
|------------------------------------------------|-----------|-------------------|----------|---------|-------|---------------|-------|
| 1. It is important to disclose Green Banking Activities | Frequency | - | 2 | 50 | 302 | 276 | 630 |
| | Percent | - | 0.3 | 7.9 | 47.9 | 43.8 | 100 |
| | Cumulative Percent | - | 0.3 | 8.3 | 56.2 | 100.0 | - |
2. It is important to communicate Green Practices

|                | Frequency |        |       |       |       |       |
|----------------|-----------|--------|-------|-------|-------|-------|
|                | 1         | 1      | 38    | 303   | 287   | 630   |
| Percent        | 0.2       | 0.2    | 6.0   | 48.1  | 45.6  | 100.0 |
| Cumulative     | 0.2       | 0.3    | 6.3   | 54.4  | 100.0 |
| Percent        |           |        |       |       |       |       |

3. Green Banking Disclosures are vital to the social image of a bank

|                | Frequency |        |       |       |       |       |
|----------------|-----------|--------|-------|-------|-------|-------|
|                | 1         | 2      | 128   | 239   | 260   | 630   |
| Percent        | 0.2       | 0.3    | 20.3  | 37.9  | 41.3  | 100.0 |
| Cumulative     | 0.2       | 0.5    | 20.8  | 58.7  | 100.0 |
| Percent        |           |        |       |       |       |       |

Source: Authors’ Compilation

In Table 1, it is seen that the majority of the stakeholders (47.9%) agreed that it is important to disclose Green Banking activities. Only 0.3% of the stakeholders have stated that it is not important to disclose Green Banking activities. Also, the majority of the stakeholders have agreed that it is important to communicate Green Banking practices and less than 1% (0.3%) have stated that it is not important to communicate Green Banking practices. 79.2% of the stakeholders have agreed and strongly agreed that Green Banking disclosures are vital for the social image of the bank. And only 0.5% of the total stakeholders have disagreed on the same. Thus, it can be concluded that the majority of the stakeholders have agreed on the importance of Green Banking disclosures.

Importance of Green Banking Disclosures across Demographic Variables

The association of Importance of Green Banking Disclosures with demographic variables is studied in two ways. At first, Cross-Tabulation is used to see how stakeholders of different gender, marital status, bank category and stakeholder of different nature perceive the importance of Green Banking disclosures. The items were measured in a 5 point Likert scale. For the purpose of analysis, strongly agree and agree are clubbed together and recoded as agree, strongly disagree and disagree are clubbed together and recoded as disagree, and neutral has been kept as neutral.

Table 2: IMPDISCLOSEGB * Gender Cross Tabulation

| Gender | Count | Male | Female | Total |
|--------|-------|------|--------|-------|
|        |       | 1    | 1      | 2     |
|        | % within IMPDISCLOSEGB | 50.0% | 50.0% | 100.0% |
|        | % within Gender | 0.2% | 0.4% | 0.3% |
| IMPDISCLOSEGB | Disagree | | | |
|        | Count | 31   | 19     | 50    |
|        | % within IMPDISCLOSEGB | 62.0% | 38.0% | 100.0% |
|        | % within Gender | 7.6% | 8.5% | 7.9% |
|        | Count | 374  | 204    | 578   |
|        | % within IMPDISCLOSEGB | 64.7% | 35.3% | 100.0% |
|        | % within Gender | 92.1% | 91.1% | 91.7% |
|        | Count | 406  | 224    | 630   |
|        | % within IMPDISCLOSEGB | 64.4% | 35.6% | 100.0% |
|        | % within Gender | 100.0% | 100.0% | 100.0% |

Source: Authors’ Compilation
92% of the Male stakeholders and 91% of the Female stakeholders have agreed that it is important to disclose Green Banking activities. An equal percentage of male and female stakeholders disagreed that it is important to disclose Green Banking activities. A higher percentage of male stakeholders agreed that it is important to disclose Green Banking activities than female stakeholders.

Table 3: IMPDISCLOSEGB * Marital Status Cross Tabulation

| Marital Status | IMPDISCLOSEGB | Count | Married | Unmarried | Total |
|----------------|---------------|-------|---------|-----------|-------|
|                | Disagree      | Count | 1       | 1         | 2     |
|                | % within IMPDISCLOSEGB | 50.0% | 50.0% | 100.0% |
|                | % within Gender | 0.2% | 0.4% | 0.3% |
|                | Neutral       | Count | 31      | 19        | 50    |
|                | % within IMPDISCLOSEGB | 62.0% | 38.0% | 100.0% |
|                | % within Gender | 7.6% | 8.5% | 7.9% |
|                | Agree         | Count | 374     | 204       | 578   |
|                | % within IMPDISCLOSEGB | 64.7% | 35.3% | 100.0% |
|                | % within Gender | 92.1% | 91.1% | 91.7% |
|                | Total         | Count | 406     | 224       | 630   |
|                | % within IMPDISCLOSEGB | 64.4% | 35.6% | 100.0% |
|                | % within Gender | 100.0% | 100.0% | 100.0% |

Source: Authors’ Compilation

92% of the Married stakeholders and 92% of the Unmarried stakeholders have agreed that it is important to disclose Green Banking activities. An equal percentage of married and unmarried stakeholders disagreed that it is important to disclose Green Banking activities. A higher percentage of married stakeholders agreed that it is important to disclose Green Banking activities than unmarried stakeholders.

Table 4: IMPDISCLOSEGB * Nature of Bank Cross Tabulation

| Nature of Bank | IMPDISCLOSEGB | Count | Public Sector Bank | Private Sector Bank | Total |
|----------------|---------------|-------|--------------------|---------------------|-------|
|                | Disagree      | Count | 2                  | 0                   | 2     |
|                | % within IMPDISCLOSEGB | 100.0% | 0.0% | 100.0% |
|                | % within Nature of Bank | 0.6% | 0.0% | 0.3% |
|                | Neutral       | Count | 31                 | 19                  | 50    |
|                | % within IMPDISCLOSEGB | 62.0% | 38.0% | 100.0% |
|                | % within Nature of Bank | 9.1% | 6.6% | 7.9% |
90% of the Public Sector Stakeholders and 93% of the Private stakeholders have agreed that it is important to disclose Green Banking activities. Stakeholders disagreeing that it is important to disclose Green Banking activities are all Public sector stakeholders. A higher percentage of the stakeholders who stayed neutral on this are Public sector stakeholders (62%).

| Source: Authors’ Compilation |

92% of the Bankers and 91% of the Customers have agreed that it is important to disclose Green Banking activities. Stakeholders who disagreed that it is important to disclose Green Banking activities are all Customers. An equal number of Bankers and Customers have stayed neutral on this statement.
### Table 6: IMPTOCOMMUNICATE * Gender Cross Tabulation

| IMPTOCOMMUNICATE | Total | Gender | Count | Male | Female | \% within | \% within Gender |
|------------------|-------|--------|-------|------|--------|-----------|-----------------|
| Disagree         | 2     |        |       | 1    | 1      | 50.0%     | 0.2%            |
|                  |       |        |       |      |        | 50.0%     | 0.4%            |
|                  |       |        |       | 1    | 1      | 100.0%    | 0.3%            |
| Neutral          | 38    |        |       | 25   | 13     | 65.8%     | 6.2%            |
|                  |       |        |       |      |        | 34.2%     | 5.8%            |
|                  |       |        |       | 38   |        | 100.0%    | 6.0%            |
| Agree            | 590   |        |       | 380  | 210    | 64.4%     | 93.6%           |
|                  |       |        |       |      |        | 35.6%     | 93.8%           |
|                  |       |        |       | 590  |        | 100.0%    | 93.7%           |
| Total            | 630   |        |       | 406  | 224    | 64.4%     | 100.0%          |
|                  |       |        |       |      |        | 35.6%     | 100.0%          |
|                  |       |        |       | 630  |        | 100.0%    | 100.0%          |

Source: Authors’ Compilation

94% of the male stakeholders and 94% of the female stakeholders have agreed that it is important to communicate Green practices to the stakeholders. An equal percentage of male and female stakeholders disagreed that it is important to communicate Green practices to the stakeholders. A higher percentage of male stakeholders agreed that it is important to communicate Green practices than female stakeholders.

### Table 7: IMPTOCOMMUNICATE * Marital Status Cross Tabulation

| IMPTOCOMMUNICATE | Total | Marital Status | Count | Married | Unmarried | \% within | \% within Marital Status |
|------------------|-------|----------------|-------|---------|-----------|-----------|-------------------------|
| Disagree         | 2     |                |       | 1       | 1         | 50.0%     | 0.3%                    |
|                  |       |                |       |          |           | 50.0%     | 0.4%                    |
|                  |       |                |       | 2       |           | 100.0%    | 0.3%                    |
| Neutral          | 38    |                |       | 24      | 14        | 63.2%     | 6.5%                    |
|                  |       |                |       |          |           | 36.8%     | 5.4%                    |
|                  |       |                |       | 38      |           | 100.0%    | 6.0%                    |
| Agree            | 590   |                |       | 347     | 243       | 58.8%     | 93.3%                   |
|                  |       |                |       |          |           | 41.2%     | 94.2%                   |
|                  |       |                |       | 590     |           | 100.0%    | 93.7%                   |
| Total            | 630   |                |       | 372     | 258       | 59.0%     | 93.3%                   |
|                  |       |                |       |          |           | 41.0%     | 94.2%                   |
|                  |       |                |       | 630     |           | 100.0%    | 93.7%                   |

Source: Authors’ Compilation
93% of the Married stakeholders and 94% of the Unmarried stakeholders have agreed that it is important to communicate Green practices to the stakeholders. An equal percentage of married and unmarried stakeholders disagreed on this statement.

Table 8: IMPTOCOMMUNICATE * Nature of Bank Cross Tabulation

| IMPTOCOMMUNICATE | Nature of Bank | Total |
|-------------------|----------------|-------|
|                   | Public Sector Bank | Private Sector Bank |
| Disagree          | Count 2 | 0 | 2 |
|                   | % within IMPTOCOMMUNICATE 100.0% | 0.0% | 100.0% |
|                   | % within Nature of Bank 0.6% | 0.0% | 0.3% |
| Neutral           | Count 23 | 15 | 38 |
|                   | % within IMPTOCOMMUNICATE 60.5% | 39.5% | 100.0% |
|                   | % within Nature of Bank 6.8% | 5.2% | 6.0% |
| Agree             | Count 315 | 275 | 590 |
|                   | % within IMPTOCOMMUNICATE 53.4% | 46.6% | 100.0% |
|                   | % within Nature of Bank 92.6% | 94.8% | 93.7% |
| Total             | Count 340 | 290 | 630 |
|                   | % within IMPTOCOMMUNICATE 54.0% | 46.0% | 100.0% |
|                   | % within Nature of Bank 100.0% | 100.0% | 100.0% |

Source: Authors’ Compilation

93% of the Public Sector stakeholders and 95% of the Private stakeholders have agreed that it is important to communicate Green practices to the stakeholders. Stakeholders who disagreed on this statement are all Public Sector stakeholders.

Table 9: IMPTOCOMMUNICATE * Nature of Stakeholder Cross Tabulation

| IMPTOCOMMUNICATE | Nature of Stakeholder | Total |
|-------------------|-----------------------|-------|
|                   | Banker | Customer | |
| Disagree          | Count 0 | 2 | 2 |
|                   | % within IMPTOCOMMUNICATE 0.0% | 100.0% | 100.0% |
|                   | % within Nature of Stakeholder 0.0% | 0.6% | 0.3% |
| Neutral           | Count 14 | 24 | 38 |
|                   | % within IMPTOCOMMUNICATE 36.8% | 63.2% | 100.0% |
|                   | % within Nature of Stakeholder 4.4% | 7.6% | 6.0% |
| Agree             | Count 301 | 289 | 590 |
|                   | % within IMPTOCOMMUNICATE 51.0% | 49.0% | 100.0% |
96% of the Public Sector stakeholders and 92% of the Private Sector stakeholders have agreed that it is important to communicate Green practices. Stakeholders who disagreed that it is important to communicate Green practices of banks are all Customers.

Table 10: VITALSOCIALIMAGE * Gender Cross Tabulation

| VITALSOCIALIMAGE | Gender | Total |
|------------------|--------|-------|
|                  | Male   | Female|       |
| Disagree         | 2      | 1     | 3     |
| % within VITALSOCIALIMAGE | 66.7% | 33.3% | 100.0% |
| % within Gender  | 0.5%   | 0.4%  | 0.5%  |
| Neutral          | 87     | 41    | 128   |
| % within VITALSOCIALIMAGE | 68.0% | 32.0% | 100.0% |
| % within Gender  | 21.4%  | 18.3% | 20.3% |
| Agree            | 317    | 182   | 499   |
| % within VITALSOCIALIMAGE | 63.5% | 36.5% | 100.0% |
| % within Gender  | 78.1%  | 81.3% | 79.2% |
| Total            | 406    | 224   | 630   |
| % within VITALSOCIALIMAGE | 64.4% | 35.6% | 100.0% |
| % within Gender  | 100.0% | 100.0%| 100.0%|

Source: Authors’ Compilation

78% of the male stakeholders and 81% of the female stakeholders have agreed that Green Banking disclosures are important for the social image of a bank.

Table 11: VITALSOCIALIMAGE * Marital Status Cross Tabulation

| VITALSOCIALIMAGE | Marital Status | Total |
|------------------|----------------|-------|
|                  | Married        | Unmarried|   |
| Disagree         | 2              | 1       | 3  |
| % within VITALSOCIALIMAGE | 66.7% | 33.3% | 100.0% |
| % within Marital Status | 0.5%  | 0.4%   | 0.5% |
75% of the Married stakeholders and 85% of the Unmarried stakeholders have agreed that Green Banking disclosures are important for the social image of a bank. A significantly higher proportion of married stakeholders stayed neutral on this statement.

Table 12: VITALSOCIALIMAGE * Nature of Bank Cross Tabulation

| VITALSOCIALIMAGE | Agree | Neutral | Total |
|------------------|-------|---------|-------|
| **Count**        | 91    | 37      | 128   |
| % within         | 71.1% | 28.9%   | 100.0%|
| VITALSOCIALIMAGE |       |         |       |
| % within         | 24.5% | 14.3%   | 20.3% |
| Marital Status   |       |         |       |
| Count            | 279   | 220     | 499   |
| % within         | 55.9% | 44.1%   | 100.0%|
| VITALSOCIALIMAGE |       |         |       |
| % within         | 75.0% | 85.3%   | 79.2% |
| Marital Status   |       |         |       |
| **Count**        | 372   | 258     | 630   |
| % within         | 59.0% | 41.0%   | 100.0%|
| VITALSOCIALIMAGE |       |         |       |
| % within         | 100.0%| 100.0%  | 100.0%|
| Marital Status   |       |         |       |

**Source:** Authors’ Compilation
76% of the Public sector stakeholders and 82% of the Private sector stakeholders have agreed that Green Banking disclosures are important for the social image of a bank. On the other hand, a significantly higher proportion of Public sector stakeholders disagreed that Green Banking disclosures are vital for the social image of a bank than Private sector stakeholders.

Table 13: VITALSOCIALIMAGE * Nature of Stakeholder Cross Tabulation

| VITALSOCIALIMAGE | Nature of Stakeholder | Total | Banker | Customer |
|------------------|-----------------------|-------|--------|----------|
|                  | Count                 |       | 0      | 3        | 3        |
|                  | % within VITALSOCIALIMAGE |     | 0.0%   | 100.0%   | 100.0%   |
| Disagree         | % within Nature of Stakeholder |   | 0.0%   | 1.0%     | 0.5%     |
|                                                                                   |
| VITALSOCIALIMAGE | Count                 |       | 32     | 96       | 128      |
|                  | % within VITALSOCIALIMAGE |     | 25.0%  | 75.0%    | 100.0%   |
| Neutral          | % within Nature of Stakeholder |   | 10.2%  | 30.5%    | 20.3%    |
|                  | Count                 |       | 283    | 216      | 499      |
|                  | % within VITALSOCIALIMAGE |     | 56.7%  | 43.3%    | 100.0%   |
| Agree            | % within Nature of Stakeholder | | 89.8%  | 68.6%    | 79.2%    |
| Total            | Count                 |       | 315    | 315      | 630      |
|                  | % within VITALSOCIALIMAGE |     | 50.0%  | 50.0%    | 100.0%   |
|                  | % within Nature of Stakeholder | | 100.0% | 100.0%   | 100.0%   |

Source: Authors’ Compilation

90% of the Bankers and 69% of the Customers have agreed that Green Banking disclosures are important for the social image of a bank. On the other hand, stakeholders who disagreed with this statement are all Customers.

The next analysis is done to see whether stakeholders’ perception on the Importance of Green Banking disclosures differs across demographic variables. Mann-Whitney U Test is used for the analysis. Mann-Whitney U test is generally used when the dependent variable is either ordinal or continuous but is not normally distributed. It is used to compare the differences between two independent groups. The following research questions are answered:

Source: Authors’ Own

Figure 2: Research Questions for Importance of Green Banking Disclosures
### Table 14: Importance of Green Banking Disclosures amongst Demographic Variables

| Category        | Benefits                                                                 | Groups     | N     | Mean Rank | Mann-Whitney U Test Value | Sig Value | Remark |
|-----------------|--------------------------------------------------------------------------|------------|-------|-----------|---------------------------|-----------|--------|
| Gender          | 1. It is important to disclose Green Banking activities                  | Male       | 406   | 321.25    | 43137.000                 | .234      | Accept |
|                 |                                                                          | Female     | 224   | 305.08    |                           |           |        |
|                 | 2. It is important to communicate Green Practices                        | Male       | 406   | 318.36    | 44310.500                 | .551      | Accept |
|                 |                                                                          | Female     | 224   | 310.31    |                           |           |        |
|                 | 3. It is vital for the Social Image of the bank                          | Male       | 406   | 316.77    | 44957.000                 | .800      | Accept |
|                 |                                                                          | Female     | 224   | 313.20    |                           |           |        |
| Marital Status  | 1. It is important to disclose Green Banking activities                  | Married    | 372   | 306.07    | 44481.000                 | .082      | Accept |
|                 |                                                                          | Unmarried  | 258   | 329.09    |                           |           |        |
|                 | 2. It is important to communicate Green Practices                        | Married    | 372   | 310.54    | 46144.000                 | .357      | Accept |
|                 |                                                                          | Unmarried  | 258   | 322.65    |                           |           |        |
|                 | 3. It is vital for the Social Image of the bank                          | Married    | 372   | 295.99    | 40730.500                 | .001      | Reject |
|                 |                                                                          | Unmarried  | 258   | 343.63    |                           |           |        |
| Bank Category   | 1. It is important to disclose Green Banking activities                  | Public     | 340   | 312.06    | 48132.000                 | .568      | Accept |
|                 |                                                                          | Private    | 290   | 319.53    |                           |           |        |
|                 | 2. It is important to communicate Green Practices                        | Public     | 340   | 315.57    | 49277.500                 | .991      | Accept |
|                 |                                                                          | Private    | 290   | 315.42    |                           |           |        |
|                 | 3. It is vital for the Social Image of the bank                          | Public     | 340   | 304.30    | 45492.500                 | .072      | Accept |
|                 |                                                                          | Private    | 290   | 328.63    |                           |           |        |
| Nature of       | 1. It is important to disclose Green Banking activities                  | Bankers    | 315   | 340.91    | 41607.500                 | .000      | Reject |
| Stakeholder     |                                                                          | Customers  | 315   | 290.09    |                           |           |        |
|                 | 2. It is important to communicate Green Practices                        | Bankers    | 315   | 348.31    | 39277.000                 | .000      | Reject |
|                 |                                                                          | Customers  | 315   | 282.69    |                           |           |        |
|                 | 3. It is vital for the Social Image of the bank                          | Bankers    | 315   | 358.30    | 36131.500                 | .000      | Reject |
|                 |                                                                          | Customers  | 315   | 272.70    |                           |           |        |

**Source:** Authors’ Compilation

Table 14 depicts the results of the Mann-Whitney U Test. It is seen that stakeholders of different Bank categories (Public and Private Stakeholders) and stakeholders of different Gender do not differ in their perception regarding the different items of Importance of Green Banking disclosures. However, married and unmarried stakeholders do differ about their perception on Green Banking disclosures being vital for the social image of a bank. The key finding of the above table is that Bankers and Customers differ significantly in their perception towards the different items of Importance of Green Banking disclosures.

**Benefits of Green Banking Disclosures**

The benefits of disclosing Green activities of banks are measured with 5 items, namely the following: it enhances knowledge on Green Banking, makes it easier to handle new technologies, helps to contribute towards the environment, gives positive impressions of a bank’s prospects, gives new insights into environmental problems and helps in long term sustainability of banks. The items are measured on a 5 point-Likert scale. The benefits are analyzed using frequency analysis and the results are stated below:
Table 15: Frequency Analysis of Benefits of Green Banking Disclosures

| Benefits                                                      | Frequency | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Total |
|---------------------------------------------------------------|-----------|-------------------|----------|---------|-------|----------------|-------|
| 1. Disclosures enhances knowledge on Green Banking            | Frequency | -                 | 7        | 36      | 348   | 239            | 630   |
|                                                               | Percent   | -                 | 1.1      | 5.7     | 55.2  | 37.9           | 100   |
|                                                               | Cumulative Percent | -            | 1.1      | 6.8     | 62.1  | 100.0          | -     |
| 2. Disclosures helps to handle new technologies               | Frequency | 1                 | 12       | 58      | 333   | 226            | 630   |
|                                                               | Percent   | 0.2               | 1.9      | 9.2     | 52.9  | 35.9           | 100.0 |
|                                                               | Cumulative Percent | 0.2         | 2.1      | 11.3    | 64.1  | 100.0          | -     |
| 3. Disclosures contributes towards the environment             | Frequency | 1                 | 5        | 61      | 280   | 283            | 630   |
|                                                               | Percent   | 0.2               | 0.8      | 9.7     | 44.4  | 44.9           | 100.0 |
|                                                               | Cumulative Percent | 0.2         | 1.0      | 10.6    | 55.1  | 100.0          | -     |
| 4. Disclosures gives a positive impression of the bank’s prospects | Frequency | 2                 | 5        | 89      | 295   | 239            | 630   |
|                                                               | Percent   | 0.3               | 0.8      | 14.1    | 46.8  | 37.9           | 100.0 |
|                                                               | Cumulative Percent | 0.3         | 1.1      | 15.2    | 62.1  | 100.0          | -     |
| 5. Disclosures gives insights on environmental problems        | Frequency | 2                 | 12       | 90      | 306   | 220            | 630   |
|                                                               | Percent   | 0.3               | 1.9      | 14.3    | 48.6  | 34.9           | 100.0 |
|                                                               | Cumulative Percent | 0.3         | 2.2      | 16.5    | 65.1  | 100.0          | -     |
| 6. Disclosures helps in the long term sustainability of banks  | Frequency | -                 | 11       | 147     | 262   | 210            | 630   |
|                                                               | Percent   | -                 | 1.7      | 23.3    | 41.6  | 33.3           | 100.0 |
|                                                               | Cumulative Percent | -           | 1.7      | 25.1    | 66.7  | 100.0          | -     |

Source: Authors’ Compilation

Majority of the stakeholders (55.2%) have agreed that Green Banking disclosures enhance knowledge on Green Banking. Approximately just 1% of the stakeholders have disagreed that Green Banking disclosures enhance knowledge on Green Banking. More than 50% of the stakeholders have agreed and 36% of the stakeholders have strongly agreed that Green Banking disclosures help to handle new technologies. Only 2.1% of the stakeholders have strongly disagreed with this statement. Around 89% of the stakeholders have agreed and strongly agreed that Green Banking disclosures contribute towards the environment. Only 0.2% of the stakeholders have strongly disagreed on this benefit of Green Banking disclosure. Also, 85% of the stakeholders have agreed that Green Banking disclosures give a positive impression of the bank’s prospects. Only 1.1% has disagreed on this benefit of Green Banking disclosures. It can be observed in Table 15 that the majority of the stakeholders (49%) have agreed that Green Banking disclosures help to give new insights on environmental problems. Around 2.2% of the stakeholders have disagreed with Green Banking disclosures giving new insights into environmental problems. Lastly, the majority of the stakeholders (42%) have agreed and 33% have strongly agreed that Green Banking disclosures help in the sustainability of banks. Only 1.7% have not agreed with this benefit.
Benefits of Green Banking Disclosures across Demographic Variables

In this section, analysis is done to compare the mean differences of perception of stakeholders regarding the various items of benefits of Green Banking disclosures. Mann-Whitney U Test is used for analysis. The following research questions are examined and analyzed:

| Research Question 5          | Research Question 6          | Research Question 7          | Research Question 8          |
|------------------------------|------------------------------|------------------------------|------------------------------|
| *Is there any difference in the mean ranks regarding benefits of Green Banking Disclosures amongst Male and Female stakeholders?* | *Is there any difference in the mean ranks regarding benefits of Green Banking Disclosures amongst Married and Unmarried stakeholders?* | *Is there any difference in the mean ranks regarding benefits of Green Banking Disclosures amongst Bankers and Customers?* | *Is there any difference in the mean ranks regarding benefits of Green Banking Disclosures amongst Public Sector and Private Sector Stakeholders?* |

Table 16: Benefits of Green Banking Disclosures amongst Male and Female Stakeholders

| Benefits                                      | Groups | N    | Mean Rank | Mann-Whitney U Test Value | Sig Value | Remark                  |
|-----------------------------------------------|--------|------|-----------|---------------------------|-----------|-------------------------|
| 1. Enhances knowledge on Green Banking        | Male   | 406  | 326.22    | 41121.000                 | .024      | 0.024<0.05, Reject      |
|                                               | Female | 224  | 296.08    |                           |           |                         |
| 2. Helps to handle new technologies           | Male   | 406  | 325.25    | 41511.500                 | .044      | 0.044<0.05, Reject      |
|                                               | Female | 224  | 297.82    |                           |           |                         |
| 3. Contributes towards environment            | Male   | 406  | 320.23    | 43550.000                 | .332      | 0.332> 0.05, Accept     |
|                                               | Female | 224  | 306.92    |                           |           |                         |
| 4. Gives positive impression of bank’s prospects | Male   | 406  | 326.18    | 41135.000                 | .030      | 0.030<0.05, Reject      |
|                                               | Female | 224  | 296.14    |                           |           |                         |
| 5. Gives new insights of environmental problems | Male   | 406  | 316.61    | 45023.000                 | .823      | 0.823> 0.05, Accept     |
|                                               | Female | 224  | 313.50    |                           |           |                         |
| 6. Helps in long term sustainability of banks | Male   | 406  | 318.76    | 44148.500                 | .518      | 0.518> 0.05, Accept     |
|                                               | Female | 224  | 309.59    |                           |           |                         |

Source: Authors’ Own

Figure 3: Research Questions for Benefits of Green Banking Disclosures

Table 16: Benefits of Green Banking Disclosures amongst Male and Female Stakeholders

It can be seen in Table 16 that male and female stakeholders differ in perception regarding 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. The corresponding mean ranks support the results.
Table 17: Benefits of Green Banking Disclosures amongst Married and Unmarried Stakeholders

| Benefits                                                                 | Groups   | N   | Mean Rank | Mann-Whitney U Test Value | Sig Value | Remark          |
|--------------------------------------------------------------------------|----------|-----|-----------|---------------------------|-----------|-----------------|
| 1. Enhancement of knowledge on Green Banking                           | Married  | 372 | 309.85    | 45884.500                | .288      | 0.288>0.05, Accept |
|                                                                          | Unmarried| 258 | 323.65    |                          |           |                 |
| 2. Helps to handle new technologies                                      | Married  | 372 | 313.28    | 47163.500                | .683      | 0.683>0.05, Accept |
|                                                                          | Unmarried| 258 | 318.70    |                          |           |                 |
| 3. Contributes towards environment                                       | Married  | 372 | 305.20    | 44158.000                | .060      | 0.060>0.05, Accept |
|                                                                          | Unmarried| 258 | 330.34    |                          |           |                 |
| 4. Gives positive impression of bank’s prospects                         | Married  | 372 | 311.45    | 46482.500                | .465      | 0.465>0.05, Accept |
|                                                                          | Unmarried| 258 | 321.34    |                          |           |                 |
| 5. Gives new insights of environmental problems                         | Married  | 372 | 307.58    | 45043.000                | .153      | 0.153>0.05, Accept |
|                                                                          | Unmarried| 258 | 326.91    |                          |           |                 |
| 6. Helps in long term sustainability of banks                           | Married  | 372 | 312.43    | 46844.500                | .587      | 0.587>0.05, Accept |
|                                                                          | Unmarried| 258 | 319.93    |                          |           |                 |

Source: Authors’ Compilation

The Sig Values in Table 17 are all greater than 0.05, thus it can be concluded that exists no significant difference in the perception of married and unmarried stakeholders regarding the benefits of Green Banking disclosures. Further, the mean ranks show no significant difference, thus supporting the results of the Mann-Whitney U Test.

Table 18: Benefits of Green Banking Disclosures amongst Public and Private Stakeholder

| Benefits                                                                 | Groups   | N   | Mean Rank | Mann-Whitney U Test Value | Sig Value | Remark          |
|--------------------------------------------------------------------------|----------|-----|-----------|---------------------------|-----------|-----------------|
| 1. Enhancement of knowledge on Green Banking                           | Public   | 340 | 310.64    | 47648.000                | .410      | 0.410>0.05, Accept |
|                                                                          | Private  | 290 | 321.20    |                          |           |                 |
| 2. Helps to handle new technologies                                      | Public   | 340 | 312.95    | 48432.500                | .671      | 0.671>0.05, Accept |
|                                                                          | Private  | 290 | 318.49    |                          |           |                 |
| 3. Contributes towards environment                                       | Public   | 340 | 312.34    | 48227.000                | .603      | 0.603>0.05, Accept |
|                                                                          | Private  | 290 | 319.20    |                          |           |                 |
| 4. Gives positive impression of bank’s prospects                         | Public   | 340 | 314.11    | 48826.500                | .820      | 0.820>0.05, Accept |
|                                                                          | Private  | 290 | 317.13    |                          |           |                 |
| 5. Gives new insights of environmental problems                         | Public   | 340 | 309.34    | 47206.000                | .316      | 0.316>0.05, Accept |
|                                                                          | Private  | 290 | 322.72    |                          |           |                 |
| 6. Helps in Long Term Sustainability of Banks                           | Public   | 340 | 306.12    | 46109.500                | .135      | 0.135>0.05, Accept |
|                                                                          | Private  | 290 | 326.50    |                          |           |                 |

Source: Authors’ Compilation
Table 18 shows that the Sig values for all the items of benefits of Green Banking disclosures are greater than 0.05. Thus, there exists no significant difference in the perception of Public Sector stakeholders and Private Sector stakeholders regarding the benefits of Green Banking disclosures. Also, the mean ranks for each of the items show no huge difference, thus confirming the results of the Mann-Whitney U Test.

Table 19: Benefits of Green Banking Disclosures amongst Bankers and Customers

| Benefits | Groups       | N  | Mean Rank | Mann-Whitney U Test Value | Sig Value | Remark          |
|----------|--------------|----|-----------|---------------------------|-----------|-----------------|
| 1. Enhancement of knowledge on Green Banking | Bankers 315 | 315 | 320.93    | 47902.500                | .396      | 0.396>0.05, Accept |
|          | Customers 315| 315 | 310.07    |                          |           |                 |
| 2. Helps to handle new technologies | Bankers 315 | 315 | 323.95    | 46951.000                | .194      | 0.194>0.05, Accept |
|          | Customers 315| 315 | 307.05    |                          |           |                 |
| 3. Contributes towards environment | Bankers 315 | 315 | 328.83    | 45414.000                | .042      | 0.042<0.05, Reject |
|          | Customers 315| 315 | 302.17    |                          |           |                 |
| 4. Gives positive impression of banks | Bankers 315 | 315 | 338.65    | 42321.000                | .000      | 0.000<0.05, Reject |
|          | Customers 315| 315 | 292.35    |                          |           |                 |
| 5. Gives new insights of environmental problems | Bankers 315 | 315 | 323.67    | 47040.500                | .219      | 0.219>0.05, Accept |
|          | Customers 315| 315 | 307.33    |                          |           |                 |
| 6. Helps in long term sustainability of banks | Bankers 315 | 315 | 351.68    | 38215.000                | .000      | 0.000<0.05, Reject |
|          | Customers 315| 315 | 279.32    |                          |           |                 |

Source: Authors’ Compilation

In Table 19, Bankers and Customers differ in perception regarding the following benefits of Green Banking disclosures: Green Banking disclosures contribute towards the environment gives a positive impression of bank’s prospects, and helps in long term sustainability of banks. The corresponding mean ranks show huge differences thus supporting the results of the Mann-Whitney U Test.

Discussion and Conclusion

The debate on climate change and the humongous losses faces by the economy due to the occurrence of natural disasters have put environmental protection on the agenda of many countries in the world (Stake Bank of Pakistan, 2017). New terminologies like Green Banking have become major factors in assessing the performance of banks. As such, this study attempts to look into the importance and benefits of Green Banking disclosures. This study reveals insightful results which are stated below:

Importance of Green Banking Disclosures

92% of the stakeholders agreed that it is important for banks to disclose Green Banking activities. 94% of the stakeholders agreed that it is important to communicate the Green practices to the stakeholders. 79% of the stakeholders agreed that Green Banking disclosures are vital for the social image of the bank.

Across Male and Female Stakeholders

A higher percentage of male stakeholders than female stakeholders have agreed that it is important to disclose and communicate Green Banking activities, and that Green Banking disclosures are vital to the social image of a bank.
Across Married and Unmarried Stakeholders
A higher percentage of married stakeholders have agreed that it is important to disclose and communicate Green Banking activities, and that Green Banking disclosures are vital to the social image of a bank.

Across Bankers and Customers
Customers disagreed that it is important to disclose and communicate Green Banking activities and that Green Banking disclosures are vital to the social image of a bank.

Across Public and Private Stakeholders
Public Sector stakeholders disagreed that it is important to disclose Green Banking activities and that it is important to communicate Green practices of bank.

The Difference in Perception on Importance of Green Banking Disclosures
Bankers and Customers differ significantly in their perception towards the importance of Green Banking disclosures. No difference in perception exists amongst stakeholders of different gender and stakeholders of different bank category (Public and Private).

Benefits of Green Banking Disclosures
Majority of the stakeholders have agreed that Green Banking disclosures enhance knowledge on Green Banking, helps to handle new technologies, contribute towards the environment, gives a positive impression of a bank’s prospects, gives new insights on environmental problems and helps in the long term sustainability of banks.

The Difference in Perception on Benefits of Green Banking Disclosures
No difference in perception exists amongst stakeholders of different gender and stakeholders of different bank categories (Public and Private) regarding the benefits of Green Banking disclosures. Male and female stakeholders differ in perception regarding the following benefits of Green Banking disclosures: enhancement of knowledge on Green Banking, helps to handle new technologies and gives a positive impression of bank’s prospects. Also, Customers and Bankers differ in perception regarding the following benefits of Green Banking disclosures: Green Banking disclosures contributes towards the environment, gives a positive impression of bank’s prospects, and helps in long term sustainability of banks.

This study makes important contributions to the theoretical body of Green Banking. According to the authors’ knowledge, this study is the first of its kind that has attempted to gauze into the scenario of Green Banking disclosures (communication of information about green activities of banks). The results of the study will assist standard setters of the banking community to identify areas that demand attention in the field of Green Banking. The study reflects for the first time the need and benefits of communicating and disclosing the Green activities of banks to the stakeholders. An interesting revelation of the study is that Customers and Bankers differ in their perception on Green Banking disclosures. This shows that the banking community in India needs to address the gap between the Bankers and Customers. Only by bridging the gap, the banks can attain equal cooperation from both internal stakeholders (employees) and external stakeholders (Customers).

Despite the contributions made by the study, the study is not free from limitations. The findings of the study cannot be extrapolated to other geographical regions of India. The study is restricted to only urban areas of India. Future researches can be done by comparing stakeholders’ perceptions on Green Banking disclosures in both Urban and Rural India.
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