



Green Banking Practices of State Bank of India – Some Insights

S. Shiva Kumar ^{a++} and Ravi Akula ^{a*}

^a Department of Commerce, Mahatma Gandhi University, Nalgonda, Telangana, India.

Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

Green banking refers to a set of banking procedures that attempts to preserve natural resources and save the environment while taking into consideration all social and environmental concerns. State Bank of India, the largest public sector bank in India is putting its humble efforts in reducing the carbon footprints by eliminating the paper printout work to the maximum extent possible. Deploying solar power systems in the bank as well as ATMs, encouraging the customers to use internet banking, extending loans towards green initiatives by corporates etc. are few to mention out of many. The present study is chosen with an objective of studying the green banking practices of SBI. The study has been carried out by administering a structured questionnaire among 400 Hyderabad based State Bank of India (SBI) customers and analyzed with the help of suitable statistical tools. An attempt is made to examine whether customers are aware of green banking products and services or not, it is also intended to study whether there is significant difference between the satisfaction levels towards green banking practices with regard to age of the customers. The study reveals that out of 400 respondents, 345 respondents are aware of green banking products/practices. In addition, this study also reveals that there is significant difference between the respondent's perceptions towards green banking practices with regard to age.

^{**} Research Scholar;

^{*}Corresponding author: E-mail: akularavi26@gmail.com;

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1. INTRODUCTION

In its simplest form, green banking is the supply of loans, deposits, and other financial products (mutual funds and other investment products, custodian services, etc.) that would have a favorable influence on the environment. "Green Bank is a typical bank that takes into account all social, environmental, and ecological concerns with a goal to preserve the environment and the natural resources" - Indian Banks Association (IBA, 2014).

Green banking activities are not, by definition, the introduction of paperless statements, electronic client communication, internal initiatives to conserve energy, paper, and toner, various internal campaigns aimed at raising and maintaining staff awareness of environmental issues, or public relations and marketing initiatives in this direction. This is so because despite the fact that all of these initiatives represent core banking principles and are used in many other types of businesses that are not banks but are nonetheless very significant to the organization and to society. In fact, banks can achieve significant savings in the cost of stationary, electricity charges.

2. REVIEW OF LITERATURE

Green banking is the order of the day, a source for sustainable development and it will undoubtedly benefit the banks, industries and the environment at large [1]. Green banking initiatives exhibit a significantly positive impact on banks' environmental performance and sources of green financing, and that sources of green financing significantly influence banks' environmental performance. Additionally, it was also observed that green financing mediates the association between green banking activities and banks' environmental performance. Furthermore, it was found that customers' awareness towards green banking is insufficient, high investment costs, technical problems, lack of skills among the staff in appraising green credits/loans, and difficulties and complexity in assessing green projects as major challenges affecting the development of green banking in Bangladesh [2]. The central bank of Bangladesh played crucial role in greening the financial sector of the nation by introducing different green policies and regulatory initiatives. Although Bangladesh is still far behind the developed countries in terms of

environmental performance, the country has made a remarkable progress in initiating and expanding green banking practices, infrastructure development, and accelerating green growth in recent years [3].

customers are receptive of the change brought on by the banks' green initiative and are willing to adopt them. Education appears to have a significant positive IMPACT [4] Banks may take advantage of using Corporate Social Responsibility (CSR) funds towards improving green banking products and services [5]. Systematic environmental issues and the stability of the banking industry are related. It looked at how Basel III handles systemic environmental hazards at the moment. It also took into account the alternative financial policy choices to Basel III. This involved looking at the effectiveness of a few additional monetary policy actions as well as using cutting-edge financial tools, such "Green" Asset-Backed Securities (ABS), to increase the flow of bank funding to eco-friendly economic activities [6]. Hossain, Sharif et al. [7], conducted a study on "Green banking: Nexus bank's performance", to find the impact of Green Banking on banks' performance using cross section data of 45 banks in the year 2012. For this study, six different variables namely; loans and advances, deposits and other accounts, paid-up capital, investments, Green Banking, and profit after tax were considered. The results found that Green Banking has a significant positive impact on investment and has a significant negative impact on banks' performance.

Islam, et al. [8], has conducted a study on "Adopting Green: from the perspective of Private Commercial Banks in Bangladesh", in order to know the reasons for adopting Green Banking practices in Bangladesh. They also tried to list out the reasons for adopting "Green" in Private Commercial Banks. Ahmad et al. [9], in their research study, focused on understanding the activities of Bangladeshi commercial banks regarding Green Banking and reasons behind adopting the Green Banking. Bimha & Nhamo [10], have conducted a study on "Conceptual framework for carbon footprints in the South African Banking sector", conceptualizing the efforts made by banks in South Africa to put phenomenal efforts to prevent climate change. According to this issue also the World Bank's report [11], titled "Inclusive Green Growth: the

Pathway to Sustainable Development” explored how green growth affects economic strategies and how it affects human or environmental welfare. The report also analyzes how infrastructure development and investment affect the creation of stronger green growth policies. It has also discovered that in order to meet the needs of the world’s poor countries for development, sustainable growth is crucial on a very wide scale.

After thorough review of literature, it was found that the studies related to green banking in India are very less, this present study is a modest attempt to explore.

3. OBJECTIVES OF THE STUDY

The basic objective of the study is to examine the green banking products and practices initiated by State Bank of India. What are the green banking products/services are known to them and whether the customers are satisfied with the SBI green banking practices or not. Also, it is intended to examine whether there is any significant difference between the satisfaction levels towards green banking practices in respect of age.

4. RESEARCH METHODOLOGY

Present study is based on both primary and secondary data. Primary data has been collected by administering a well-structured questionnaire.

Hyderabad based 400 SBI customers are taken as sample. The responses are processed and the inferences are drawn based on the suitable statistical tests.

5. DATA ANALYSIS AND DISCUSSION

The above Table 1 represents the information pertaining to profile of the respondents. Gender wise respondents are: out of the total 400 respondents, 227 respondents are female which constitutes 56.8% and remaining 173 respondents are male which accounts for 43.3%.

On the basis of age the respondents are as follows: out of 400 respondents, 170 respondents are in the age group of 21-30 years, 119 respondents are in the age group of 31-40 years, 45 respondents are aged less than 20 years, 43 respondents are aged between 41-50 years remaining 23 respondents are aged more than 50 years. From the above table it is clear that 42.5% of the respondents are in the age group of 21 to 30 years.

The below Table 2 reveals the information regarding awareness of the respondents towards green banking practices. The table shows that out of 400 respondents, 345 respondents aware of green banking practices which represents 86.3%, remaining 55 respondents are not aware of green banking representing 13.8%. Hence, it can be drawn that majority of the respondents are aware of green banking practices.

Table 1. Profile of the respondents

	Particulars	No. of Respondents	Percentage (%)
Gender	Male	173	43.3
	Female	227	56.8
	Total	400	100
Age (Years)	Below 20	45	11.3
	21-30	170	42.5
	31-40	119	29.8
	41-50	43	10.8
	Above 50	23	5.8
	Total	400	100

Source: Primary Data

Table 2. Awareness towards green banking

Aware of Green Banking	No. of Respondents	Percentage (%)
Yes	345	86.2
No	55	13.8
Total	400	100

Source: Primary Data.

Table 3. Awareness towards green banking products

Green banking Products	Yes	NO	Total
	F	F	F
ATM	339	61	400
Internet banking	341	59	400
Mobile banking	265	135	400
Telebanking	294	106	400
SMS Banking	306	94	400
E- Statements	309	91	400
Green home loans	298	102	400
Green Mortgage	278	122	400
Green Car loan	290	110	400
Green cards (Deposit cards)	272	128	400
Green Financing	259	141	400
Green Certificate of Deposits (GCDs)	254	146	400
Green Bonds	281	119	400
Green credit cards	298	102	400
Green Home Equity Loans	300	100	400

Source: Primary Data

The Table 3 depicts the information regarding awareness towards various green banking products. The table shows that majority of the respondents are aware of internet banking (341) and ATM (339). Regarding E- Statements, 309 respondents revealed that they are aware, 309 respondents responded that they are aware of SMS banking. In respect of Green Certificate of Deposits (GCD) and Green financing only 254 and 259 respondents have responded as they are aware of them. It indicates that Internet banking, ATMs, E-Statements, SMS banking and Green home equity loans are known to 75% or more than 75% of the respondents.

The Table 4 reveals usage of green banking products by respondents. There are totally 15 products are available. Out of 400 respondents, all the 400 respondents are using ATM's which equals to 100%. Second most used product is internet banking by 392 respondents which holds 98%, followed by 378 respondents using Green Home loans. Some other products like Green Mortgage are used by 367 respondents, Green Car loan are used by 361 and SMS banking by 360. Mobile banking is used by 354 respondents, E- Statements are used by 342, Green cards (Deposit cards) are used by 330 and Telebanking is used by 326 respondents. Green credit cards are used by 319, Green Home Equity Loans are used by 315 respondents, Green financing is used by 312 respondents. Green bonds are used by 294 respondents and finally Green Certificate of Deposits (GCD) used by 291 respondents.

From the Tables 3 & 4, it is observed that there are several customers who are not aware that they products are green banking products but they are using them. For example, 339 respondents have responded that they are aware that ATM is one of the green banking products and rest 61 responded that they are now aware. But when it is coming to use of ATM, all the 400 respondents have responded that they are using ATM. It is also seen in respect of several other products.

The above Table 5 represents the information about the overall satisfaction towards green banking practices. To measure the satisfaction, mean value is considered as basis and ranked accordingly. Based on satisfactory levels, respondents have rated rank wise of green banking practices in a prioritized way. There are totally four (4) green banking key factors are ranked from 1st rank to 4th rank. Mean value above 2.5 is considered as highly positive and below 2.5 values is understood as negative.

The Table 5 depicts the overall satisfaction towards green banking practices. Majority of the respondents have ranked 1st to the satisfaction in deriving the benefits of green banking practices with 4.11 mean value which is highly positive. 2nd rank is allocated to waste management and carbon footprints with 4.02 mean value which also positive. 3rd rank is bagged by the green banking services provided by SBI with 3.97 mean value and finally 4th rank is allocated to satisfaction of using green banking Products offered by SBI with 3.91 mean value which is a positive value.

Table 4. Usage of green banking products

Green Banking Products	Used	Not used	Total No.
ATM	400	0	400
Internet banking	392	8	400
Mobile banking	354	46	400
Telebanking	326	74	400
SMS Banking	360	40	400
E- Statements	342	58	400
Green home loans	378	22	400
Green Mortgage	367	33	400
Green Car loan	361	39	400
Green cards (Deposit cards)	330	70	400
Green Financing	312	88	400
Green Certificate of Deposits (GCD's)	291	109	400
Green Bonds	294	106	400
Green credit cards	319	81	400
Green Home Equity Loans	315	85	400

Source: Primary Data

Table 5. Overall satisfactions towards green banking practices

Green Banking Information.	N	Mean	Std. Deviation	Rank
Level of satisfaction in deriving the benefits of Green Banking Practices	400	4.1197	.60477	1
Waste management and carbon footprints	400	4.0232	.62202	2
Green banking Services Provided by SBI	400	3.9709	.59700	3
Satisfaction of using Green Banking Products offered by SBI	400	3.9117	.66927	4

Source: Primary Data

Null Hypothesis (H₀): "There is no significant difference between the respondent's satisfaction towards green banking practices with regard to age".

Alternative Hypothesis (H₁): "There is significant difference between the respondent's perception towards green banking practices with regard to age".

Test tool used: One-way ANOVA. Results are as follows:

The present Table 6 represents the information about customer satisfaction towards green banking practices with regard to Age. There are totally 4 dimensions on which respondents have expressed their opinion towards satisfaction towards green banking practices. To measure the customer opinion has taken Mean value as basis. This states if a mean value is more than 2.5 is highly positive and if it is less than 2.5 value is highly negative. Maximum value is 5.

The above Table 6 depicts customer satisfaction towards green banking practices with regard to

age. Age wise respondents are displayed that out of 400 samples, 45 respondents are having below 20 years with 11.3%, followed by 170 respondents are in the age group of 21-30 years which holds 42.5%. 119 respondents are under the age group of 31-40 years with 29.8%. 43 respondents in the age group of 41-50 years with 10.8%. Rest 23 respondents are above 50 years which equals to 5.8%. Here for the purpose of convenience mean value is considered on the basis of total respondents.

The first dimension of satisfaction towards green banking practices which is "Satisfaction of using green banking products offered by SBI" on that all the age group respondents have expressed positively with 3.91 mean value. The Second dimension of satisfaction towards green banking practices which is "Green banking services provided by SBI" on that all the age group respondents have expressed positively with 3.97 mean value. The third dimension of satisfaction towards green banking Practices which is "Waste management and carbon footprints" on that all the age group respondents have expressed positively with 4.02 mean value. They have given

positive opinion towards satisfactory levels. The fourth dimension of satisfaction towards green banking Practices which is “Level of satisfaction in deriving the benefits of green banking practices” on that all the age group respondents have expressed positively with 4.11 mean value. Overall, satisfaction towards four (4) dimensions of green banking practices is highly positive.

The above Table 7 is depicting the results of One-Way ANOVA in four dimensions of green banking practices towards satisfaction with regard to age. Hypothesis is validating on the basis of significance levels. If P value (Significance Value) is less than 0.05 then null hypothesis is rejected and alternative hypothesis is accepted. In other hand if P value is more than 0.05 then null hypothesis is accepted and alternative hypothesis is rejected.

The first dimension is “Satisfaction of using green banking products offered by SBI” showing the ANOVA table value as (0.006 < 0.05) which is less than P value so here null hypothesis is rejected and alternative hypothesis is accepted. Hence, it can be concluded that there is significant difference between the respondent’s

perception towards green banking practices with regard to age. The second dimension is” Green banking services provided by SBI” represents the ANOVA table value as (0.122 > 0.05) which is more than P value so here null hypothesis is accepted and alternative hypothesis is rejected. It means, there is No significant difference between respondents perception towards green banking practices with regard to age.

The third dimension is “Waste management and carbon footprints” representing the ANOVA table value as (0.036 < 0.05) which is less than P value. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. This means there is significant difference between the respondents perception towards green banking practices with regard to age. The fourth dimension is “Level of satisfaction in deriving the benefits of green banking practices” representing the ANOVA table value as (0.013 > 0.05) which is less than P value, which means the null hypothesis is rejected and alternative hypothesis is accepted. Hence, it can be concluded that there is significant difference between the respondent’s perceptions towards green banking practices with regard to age.

Table 6. Descriptive statistics for customer satisfaction towards greens banking practices

		N	Mean	Std. Deviation	Std. Error
Satisfaction of using Green Banking Products offered by SBI	Below 20	45	3.7569	.55873	.08329
	21-30	170	4.0511	.63968	.04906
	31-40	119	3.8356	.65317	.05988
	41-50	43	3.8590	.63549	.09691
	Above 50	23	3.6766	1.00154	.20883
	Total	400	3.9117	.66927	.03346
Green banking Services Provided by SBI	Below 20	45	3.8361	.62433	.09307
	21-30	170	4.0574	.58268	.04469
	31-40	119	3.9097	.59503	.05455
	41-50	43	3.9651	.57692	.08798
	Above 50	23	3.9239	.65142	.13583
	Total	400	3.9709	.59700	.02985
Waste management and carbon footprints with regard to this kindly express	Below 20	45	3.8254	.71356	.10637
	21-30	170	4.1244	.57345	.04398
	31-40	119	3.9916	.58172	.05333
	41-50	43	3.9701	.63930	.09749
	Above 50	23	3.9255	.83507	.17412
	Total	400	4.0232	.62202	.03110
Level of satisfaction in deriving the benefits of Green Banking Practices	Below 20	45	3.9037	.64944	.09681
	21-30	170	4.2203	.56701	.04349
	31-40	119	4.0962	.61507	.05638
	41-50	43	4.1059	.58642	.08943
	Above 50	23	3.9469	.65295	.13615
	Total	400	4.1197	.60477	.03024

Source: Primary Data

Table 7. One-way ANOVA

		Sum of Squares	d.f.	Mean Square	F	Sig.	Hypothesis Result
Satisfaction of using Green Banking Products offered by SBI	Between Groups	6.461	4	1.615	3.704	.006	Null Hypothesis Rejected
	Within Groups	172.262	395	.436			
	Total	178.722	399				
Green banking Services Provided by SBI	Between Groups	2.587	4	.647	1.829	.122	Null Hypothesis Accepted
	Within Groups	139.622	395	.353			
	Total	142.209	399				
Waste management and carbon footprints.	Between Groups	3.960	4	.990	2.600	.036	Null Hypothesis Rejected
	Within Groups	150.416	395	.381			
	Total	154.376	399				
Level of satisfaction in deriving the benefits of Green Banking Practices	Between Groups	4.580	4	1.145	3.199	.013	Null Hypothesis Rejected
	Within Groups	141.354	395	.358			
	Total	145.933	399				

Source: Primary Data

6. CONCLUSION

Throughout the globe, corporates, governments are taking many steps towards creating green environment. Banking sector is one of the important areas where the scope for green initiatives is immense. When compared with developed countries, the Indian banks are lagging behind in this direction. State Bank of India being the largest public sector bank in India should lead the other banks by initiating green practices. The study reveals that majority of the customers are aware of green banking products and services. Out of 400 respondents, 345 respondents responded that they are aware of green banking. Though the study denotes positive sign, there are 55 respondents which represents about 13.75% are unaware of green banking. To achieve the intended targets it is essential to create awareness amongst the customers in this direction. The study also reiterates that there is significant difference between the customers satisfaction towards green banking with regard to age with regard to Satisfaction of using Green Banking Products offered by SBI, Waste management and carbon footprints, Level of satisfaction in deriving the benefits of green banking practices. Overall, it can be concluded that age is one of the influencing factors. Keeping in view of the

hazards due to climate change, it is inevitable to the banks and corporates to initiate eco-friendly practices such as green initiative/products.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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