

GREEN BANKING: A PANACEA FOR THE FUTURE OF INDIAN BANKING

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ABSTRACT

Environmental degradation comes together with economic growth's advantages. Global warming has resulted from it, endangering the existence of all life on Earth. The foundation of economic expansion is the financial system. It still has a number of issues, including a shortage of human resources, a limited branch network, particularly in outlying locations, bad loans, consumer unhappiness due to security breaches, the possibility of fraud, and a discrepancy between promise and performance. Green finance is the complete answer to all issues. It is a new field that is giving banking institutions new chances and competitive benefits. A sustainable financial system is paved with green banking methods and tactics. Therefore, the researcher's goal in this study is to examine green banking strategies that could help to solve all the issues with the banking system. The researcher attempts to examine how implementing these green banking practises in financial organisations like banks can work as a panacea for the Indian banking sector and how they are helping the public and society as a whole to address the issues of the modern day.

Keywords: *Economy, Green Banking, Environment, Sustainability, Panacea.*

Introduction

Any nation's development depends heavily on its banking sector. The economy and environment of a country prosper when the financial system is robust and well-developed. Banks may significantly contribute to sustainability by raising social knowledge as they interact with the general public. As the idea of sustainable development has gained traction, banking institutions have begun to move away from the traditional bottom-line strategy that prioritises profits in favour of a system that emphasises the process of the three Ps, or People, Planet, and Profit, which stands for the economy, the environment, and society. Therefore, in order to achieve their goals, modern banks and other financial organisations place a strong emphasis on environmental protection. The first is intended to stand in for a morally and socially responsible financial system. The second is their responsibility to uphold corporate social responsibility (Tara et al., 2015).

The financial sector, particularly banks, are under intense pressure to undertake programmes for green banking as environmental issues are receiving more and more attention these days. Although people still don't choose financial institutions based on the green banking initiatives they take, it is undeniable that the customers' propensity for environmental protection has inspired many financial organisations to go green (Biswas, 2011). As a result, banks can develop innovative methods and plans that emphasise sustainability.

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The idea of "green banking" is advantageous to banks, businesses engaged in other industries, and the whole economy (Yadav et al., 2013). As the financial institutions become more focused on achieving the goals of a green environment by playing a significant role in the economy and expanding their reach for potential green investments, green banking not only ensures the greening of new ventures taking place in the country but also helps in improving the brand image and asset quality of the banks in the future (Gupta, 2015). Additionally, the banking industry has a tremendous impact on a country's economy and development on a qualitative as well as quantitative level. It serves as the main source of funding for investments in business projects. Therefore, banks can encourage environmental sustainability by taking their social duty into account while making investments (Deka, 2015).

In order to change the face of the banking industry in the nation, more green banking approaches must be implemented in banks.

Objectives

- The following goals form the basis of the study:
- To research the advantages of green banking compared to standard banking.
- To investigate whether bank consumers believe that green banking will save Indian banking in the future.
- To investigate whether bank personnel believe that green banking will save Indian banking in the future.

Review of Literature

Park et al. (2020) The researcher came to the conclusion that green banking is a developing industry that gives the banking sector a competitive edge, opens up new business prospects, and can help safeguard the financial system and control the risks of specific financial institutions. Additionally, because it affects all economic sectors, climate change is no longer just an environmental concern. Therefore, green banking activities are essential to reducing the detrimental effects of climate change on the financial sector's physical and transitional risks. The authors of this report outlined the obstacles to green banking as well as strategies for overcoming them.

Kaur et al. (2018) analysed the transition towards sustainable growth that the Indian banking industry has experienced thanks to various green banking initiatives. The benefits of green banking extend beyond the banks to the economy as a whole and to each and every one of us. Banks save money and encourage clients to engage in more paperless transactions, lowering their carbon footprints for each transaction made possible by green banking strategies. As a result, everyone benefits—financial institutions, society, and the environment.

Tara et al. (2015) The researcher investigated from the perspective of environmental management, the concept of "green banking" was investigated. Our lives are more comfortable, yet industrialization and globalisation have also caused the environment to deteriorate. As more businesses and financial institutions become aware of the value of the environment, they try to adapt the way they go about some of their regular tasks. The banks have a crucial part to play in fostering environmental sustainability.

Bhardwaj et al. (2013) Green banking has been described as a bank-led initiative to green industry and improve the environment. Green banking also makes it possible for banks' asset quality to increase in the future. The writers of this paper addressed every green banking strategy that has aided and will continue to aid the banks in clearing the way for the future of the Indian banking industry.

Bahl (2012) also talked on green banking as the newest strategic requirement. Today, every business touts how environmentally friendly its packaging, processes, other operations, etc. are. However, becoming green has a very promising future. Going green is very important in the banking industry since it encourages eco-friendly behaviour and lowers the carbon footprints left by various banking activities. To achieve this, efforts include funding an increasing number of environmentally friendly projects and green technologies.

Biswas (2011) examined the sustainable green banking strategy as an urgent need. According to the author, green banking is a result of operational enhancements, technological advancements, and a shift in the behaviour of banking sector customers. Adopting greener banking techniques will minimise expenses associated with traditional banking activities, increase operational efficiency for the environment, and lessen vulnerability to fraud and errors brought on by physical labour. According to the studies, the author also came to the conclusion that banks should adopt more environmentally friendly practises in the future and take a proactive approach to including mental and ecological considerations in their lending principles for environmental management and sensible technology use.

Research Methodology

The information supporting the current paper has been gathered through primary and secondary research.

- **Primary Study:** The information was gathered via a well-written questionnaire distributed to those involved in the banking industry, including both bank employees and clients who use the green banking strategies promoted by the banks from whom they obtain banking services.
- **Sample Size:** A total of 97 people were included in the sample, of whom 66 were consumers who use green banking services offered by the banks where their bank accounts are held, and 31 were banking officials who participated in implementing existing green banking techniques.
- **Statistical Tools for Analysis:** SPSS is used to analyse the data gathered from the questionnaire that was developed, and other statistical tools are also utilised to show the results in accordance with the criteria needed for the outcomes.
- **Secondary Study:** The information was also gathered from secondary sources, such as reports, reports available from specialists in the subject, and other material that has been documented. To comprehend the function of green banking techniques in altering society in general and the future of the Indian banking system in particular, other aspects of the banking sector have also been examined. Green banking's contribution to preserving the ecological balance, sustainable growth, and sustainable banking are a few of these areas. The writings of those who have conducted research or worked in this area have been studied. This includes writers like Biswas (2011), Tara et al. (2015), Bhardwaj et al. (2013), Park et al. (2020), Kaur et al. (2018), and others.

This essay seeks to investigate many aspects and criteria that may be used to determine whether green banking is the best solution to every issue plaguing the economy and Indian financial sector.

Benefits of Traditional Banking

High operational costs: traditional banking has numerous operational costs, such as building rent, atm security, stationary, personnel compensation/salaries, maintenance fees, etc.

Sluggish processes: traditional banking also has slow processes, which is a drawback. bank transactions typically take a long time to complete. transactions involving multiple banks take a long time, especially on the weekends and on holidays.

- **Time Restrictions:** traditional banks only offer their services between the hours of 9 am and 5 pm on business days. on holidays or after business hours, people are unable to conduct banking activities.
- **Long Queues:** in Indian bank branches, long lines are a typical occurrence. crowds at branches waste a lot of time for consumers even for routine banking services like balance inquiries or money deposits because there are few bank branches and a large population.
- **Limited Branch Network:** India only has 14.7 bank branches per 100,000 people, which is not enough to meet the nation's banking demands.
- **Substantial Fees:** because traditional banks have high operational costs, their fees are typically high. customers must pay expensive fees for routine financial transactions.
- **Risk of Frauds or Errors:** traditional banking carries a significant risk of frauds or errors. there are several instances of bank staff defrauding consumers and taking their hard-earned money. in addition, the manual approach increases the likelihood of inaccuracy.
- **Lack of Cost Efficiency:** both banks and clients find traditional banks to be expensive. the cost of banking rises as a result of high operating expenses. every banking transaction requires customers to travel to a bank branch, which is expensive. additionally, it produces carbon footprints because it uses automobiles and electronic devices to conduct banking operations.

Benefits of Green Banking

- **Low Running Expenses:** since green banking relies on virtual banking, its operating costs are minimal.
- Green banking services are accessible around-the-clock. even on weekends and holidays, clients can access financial services.
- **Reducing Carbon Footprint:** India has the second-largest population in the world, and it is growing quickly. additionally, india is ranked 110th in the world, emitting 2411.73 mt of co2 annually, or 1.74 tonnes of co2 per person (world population review, 2022). the utilisation of natural resources and carbon footprints in banking institutions are significantly decreased through green banking.
- Green banking protects the protection of data and transactions, which increases security. when adopting green financial services, there is less fraud and error.
- **Environmental Sustainability:** rather than concentrating just on profits, green banking emphasises the three p's: people, planet, and profits. its goal is to safeguard the environment.
- **Cost-effectiveness:** the basic criterion for determining the acceptance of any good or service is its price. both banks and customers can afford green banking services.
- **Customer Satisfaction:** the success of any organisation depends on keeping customers happy. customers come first and are at the centre of the design process for green financial services. customer satisfaction is therefore highest with green banking services.

Primary Data Analysis

- **Analysis of Data Collected from the Bank Customers**

Table Error! No text of specified style in document.: Demographic Profile of Bank Customers

		Count	Table N %
Gender	Male	34	51.52%
	Female	32	48.48%
Age Group	Below 20 years	8	12.12%
	21 to 40 years	34	51.52%
	41 to 60 years	14	21.21%
	61 years and above	10	15.15%
Level of Education	Primary	4	6.06%
	Matric	12	18.18%
	Graduate	22	33.33%
	Post Graduate	28	42.42%
In which type of bank are you holding an account?	Public Sector bank	44	66.67%
	Private Sector bank	22	33.33%

The 66 respondents are depicted in the above table according to their demographic characteristics, which were categorised based on three factors: gender, age group, and educational attainment. The same was calculated for count and percentage.

Table 2: Bank Customers' Access to Green Banking

		Count	Table N %
Do you use a smartphone or a computer?	Yes	66	100.00%
	No	0	0.00%
Are You using internet banking or mobile banking services of the bank?	Yes	65	98.48%
	No	1	1.52%

Five "yes or no" questions were posed to the respondents with the goal of eliciting a general understanding of the customers' access to green banking. Once more, count and percentage calculations were made to distinguish between individuals who employ green banking practises and those who do not. The majority of clients use green banking services.

Table 3: Bank Customers' Perception of Green Banking

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	t-value
							St Dev	Sign.
Is technological knowledge required for online banking services?	n	6	27	2	13	18	3.1515	.856
	%	9.09	40.91	3.03	19.70	27.27	1.43840	.395
Are services in green banking initiatives of the banks easy to use?	n	0	0	0	34	32	4.4848	23.953
	%	0.00	0.00	0.00	51.52	48.48	.50360	.000
Does the use of mobile and internet banking save time and resources?	n	0	0	0	20	46	4.6970	29.770
	%	0.00	0.00	0.00	30.30	69.70	.46309	.000
Is there no need to go and search bank branches now to avail of the basic banking facilities?	n	0	4	2	44	16	4.0909	12.353
	%	0.00	6.06	3.03	66.67	24.24	.71742	.000
Is sufficient support available from the banking officials regarding green banking services?	n	0	3	0	45	18	4.1818	14.676
	%	0.00	4.55	0.00	68.18	27.27	.65420	.000
The bank should train the customers to use the green banking services introduced by the banks.	n	0	0	2	32	32	4.4545	21.112
	%	0.00	0.00	3.03	48.48	48.48	.55972	.000
Green banking techniques have made your life easy and luxurious by facilitating real-time transactions.	n	0	0	2	26	38	4.5455	22.431
	%	0.00	0.00	3.03	39.39	57.58	.55972	.000
Is there no need to maintain the banking documents in the complex form after implementing green banking techniques in the banks?	n	2	16	6	36	6	3.4242	3.272
	%	3.03	24.24	9.09	54.55	9.09	1.05336	.002

Eight Likert statements were also given to the banks' clients to gain a sense of how they felt about green banking, as seen in the table above. A five-point Likert scale with the options strongly disagree to strongly agree was given to the respondents to score their opinions. The results are shown in the table above.

- All of the estimated Mean Scores were more than 3, indicating the scale's agreement side.
- All of the statements' standard deviations were smaller than one, indicating that respondents had a consistent answer.
- Is technological knowledge required for the online banking services? The calculated value of the t-test (test value 3, d.f. 65) was found to be positive, with a p-value of less than 0.05, which confirms that the mean value of responses is more than 3 expected for the first statement. This shows positive t-value, with a p-value of more than 0.05, which states that mean value is equal to 3.

H₀₁: There is no significant difference in bank Customers' perception of green banking as a panacea for the future of Indian Banking.

The responses gathered based on the eight Likert statements provided in Table 1 were used to test the aforementioned hypothesis. A separate t-test was used to determine the significance of the mean of the two groups (Group 1 = Public Sector bank and Group 2 = Private Sector bank), and the results were as follows.

Table 4: Group Statistics Perception towards Green Banking

In which type of bank are you holding an account?		N	Mean	Std. Deviation	Std. Error Mean
Mean Score	Public Sector bank	44	4.0398	.41041	.06187
	Private Sector bank	22	4.3068	.24618	.05249

According to the aforementioned table, the mean and standard deviation for Group 1 Public Sector Bank (n=44) and Group 2 Private Sector Bank (n=22) respectively were 4.0398 and .41041 and 4.3068 and .24618 respectively.

Independent Samples Test				
		Mean Score		
		Equal Variances Assumed	Equal Variances not Assumed	
Levene's Test for Equality of Variances	F	4.733		
	Sig.	.033		
t-test for Equality of Means	t	-2.804	-3.291	
	df	64	61.715	
	Sig. (2-tailed)	.007	.002	
	Mean Difference	-.26705	-.26705	
	Std. Error Difference	.09525	.08114	
	95% Confidence Interval of the Difference	Lower	-.45732	-.42925
		Upper	-.07677	-.10484

The statistical findings shown in the above table demonstrate that the researcher assumed there was no equal variance because the p-value of Levene's Test for Equality of Variances was less than 0.05. We reject the null hypothesis since the significance value of the t-test was less than 0.05, which indicates that there is a substantial difference in how bank customers view green banking as a solution for the future of Indian banking. One may draw the conclusion that consumers of private sector banks view green banking more favourably as a solution for the future of Indian banking.

- **Analysis of Data Collected from Bank Employees**

Information on the statistical analysis of bank workers is covered in the section that follows.

Table 5: Profile of Bank Employees

		Count	Table N %
Designation	Officer	6	19.35%
	Cashier	7	22.58%
	Assistant Manager	7	22.58%
	Manager	9	29.03%
	Clerk	2	6.45%
Gender	Male	19	61.29%
	Female	12	38.71%
Which sector are you associated with?	Public Sector Bank	17	54.84%
	Private Sector Bank	14	45.16%

The demographic profile of the 31 respondents, shown in the above table, is based on three factors: designation, gender, and the relevant industry. The same was calculated for count and percentage.

Table 6: General Awareness

		Count	Table N %
Was any training given for non-problematic implementation of the green banking techniques to the staff of the banks?	Yes	18	58.06%
	No	13	41.94%
Are the customers fully aware of the services given under the green banking initiative?	Yes	22	70.97%
	No	9	29.03%

Two "yes" or "no" questions were posed to the respondents in an effort to gauge their overall knowledge of how green banking is being applied on the side of the employees. In order to distinguish between respondents who agree and disagree with the stated questions about green banking practise, count and percentage calculations were once again used.

Table 7: Perception of Respondents

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	t-test
							St Dev	p-value
Are you feeling the ease of service regarding the banking work being less cumbersome using green banking?	n	0	0	0	11	20	4.65	18.833
	%	0.00	0.00	0.00	35.48	64.52	.486	.000
Is Technological know-how an issue in implementing green banking techniques?	n	0	5	1	23	2	3.71	4.793
	%	0.00	16.13	3.23	74.19	6.45	.824	.000
Do you feel well-planned training is needed by the banking staff for smooth implementation of the novel green banking techniques?	n	0	0	0	10	21	4.68	19.654
	%	0.00	0.00	0.00	32.26	67.74	.475	.000
Due to green banking initiatives, is there some decrease in the paperwork and the manual records to maintain in the bank branches?	n	0	0	0	13	18	4.58	17.545
	%	0.00	0.00	0.00	41.94	58.06	.502	.000
Do Incidents of fraud and risk of errors decrease substantially by automating all the work of the banks?	n	0	2	0	13	16	4.39	9.615
	%	0.00	6.45	0.00	41.94	51.61	.803	.000
Is internet connectivity and speed an issue in converting traditional banking services to internet banking and mobile banking?	n	0	0	0	15	16	4.52	16.617
	%	0.00	0.00	0.00	48.39	51.61	.508	.000
Do you feel programs and initiatives should also be planned for the training and awareness of the bankers and customers regarding green banking initiatives?	n	0	0	0	2	29	4.94	43.152
	%	0.00	0.00	0.00	6.45	93.55	.250	.000
Do the fellow banking officials and the customers show acceptability to the change in the banking scenario?	n	0	0	0	12	19	4.61	18.137
	%	0.00	0.00	0.00	38.71	61.29	.495	.000

Eight Likert statements were also given to bank employees in order to gauge their opinions on green banking, which are accurately summarised in the table above. An opinion rating scale with five possible outcomes, from strongly disagree to strongly agree, was given to the respondents. To produce useful results, standard deviation and t-value calculations were made. Overall, it was discovered that the responses leaned more toward the scale's side of agreement.

- All of the calculated mean scores exceeded 3, which represents the scale's agreement side.
- All of the statements' standard deviations were under one, indicating that respondents' responses were generally consistent.
- With a p-value of less than 0.05, the calculated t-test result (test value 3, d.f. 65) was determined to be positive, indicating that the mean value of replies is more than 3.

H₀₂: There is no significant difference in the perception of respondents (Bank Employees) about Green Banking as a panacea for the future of Indian Banking

The responses gathered based on the eight Likert statements provided in Table 1 were used to test the aforementioned hypothesis. An independent t-test was used to determine the significance of the mean of the two groups (Group 1 = Public Sector bank and Group 2 = Private Sector bank) after 8 were averaged. The results were as follows.

Table 8: Group Statistics

Which sector are you associated with?		N	Mean	Std. Deviation	Std. Error Mean
Mean Score	Public Sector Bank	17	4.4559	.22509	.05459
	Private Sector Bank	14	4.5714	.24374	.06514

According to the aforementioned table, the mean and standard deviation for Group 1 Public Sector Bank (n=17) and Group 2 Private Sector Bank (n=31) respectively were 4.4559 and .22509, and 4.5714 and .24374, respectively.

Independent Samples Test			
		Mean Score	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.273	
	Sig.	.605	
t-test for Equality of Means	t	-1.370	-1.359
	df	29	26.894
	Sig. (2-tailed)	.181	.185
	Mean Difference	-.11555	-.11555
	Std. Error Difference	.08432	.08499
	95% Confidence Interval of the Difference	Lower	-.28800
	Upper	.05691	.05888

The statistical findings shown in the above table demonstrate that the researcher assumed equal variance because the p-value of Levene's Test for Equality of Variances was greater than 0.05. We accept the null hypothesis and draw the conclusion that there is no significant difference in bank workers' perceptions of green banking as a solution for the future of Indian banking because the significance value of the t-test was found to be greater than 0.05.

Findings

- According to the findings, both bank personnel and consumers are in favour of green banking. However, when it comes to making a contrast between employees in the public and private sectors, it is found that the public sector employees experience more resistance to change than the private sector employees do.
- Given the diversity of the respondents, people with insufficient education have a difficult time adapting to the new banking methods. They primarily do business with public sector banks. Consequently, their perspectives on green banking could be viewed to differ significantly.
- The study's conclusion was that there is a significant difference in how respondents (bank customers) view green banking as a solution for the future of Indian banking, rejecting the null hypothesis in the process.
- No discernible difference could be seen about green banking among the workers of private or public banks. Since the excessive burden has been minimised and the system now operates with a high degree of precision and correctness, both sector personnel are supportive of the green banking strategies. The researcher thus agreed with the null hypothesis and came to the conclusion that there is no appreciable variation in how respondents (Bank Employees) saw Green Banking as a solution for the future of Indian banking.

Conclusions

Based on the statistical analysis performed for the study report, it is possible to draw the general conclusion that customers and bank staff have begun to embrace green banking enthusiastically. Every big change elicits opposition at first, and green banking is no exception. People found it challenging to adjust to the online manner of dealing, but they did so gradually and now use it as if they had always done so in terms of banking. Our research showed that the majority of public sector bank clients came from rural areas and were only somewhat educated; as a result, they had greater difficulties than urban and knowledgeable personnel, who could handle every transaction over the phone. When it comes to bank personnel, they initially found it challenging but subsequently learned that green banking has a number of benefits that are beneficial to society, clients, and themselves as well. As a result, Green Banking is both essential to modern civilization and urgently needed, making it necessary in the current environment.

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