





Embracing Sustainability: The Evolution of Conventional Banking through Green Banking Initiatives

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Abstract. In India, the banking sector wields substantial influence over various industries and plays a pivotal role in the country's economic and monetary progress. Recently, there has been a growing emphasis on environmental consciousness and ethical social responsibility within banking practices, leading to the emergence of the Green Banking concept in contemporary finance. This shift towards sustainability in banking has been instrumental in fostering the nation's green initiatives. The successful implementation of Green Banking practices hinges on raising public awareness about these initiatives. Therefore, this study aims to meticulously explore the Green Banking initiatives embraced by various banks. Additionally, this research assesses the extent to which these initiatives have been integrated into the banking sector. The findings of the study underscore the importance of giving equal attention to all aspects of Green Banking, including eco-friendly practices and their consistent enforcement, the incorporation of green processes within internal banking operations, efficient waste management strategies, energy conservation measures, as well as green funding and carbon offset initiatives. It is imperative for banks to prioritize these diverse Green Banking initiatives to facilitate sustainable development and contribute significantly to environmental preservation.

KEYWORDS: Green Banking, Global Warming, Climate Change, Go Green, Corporate Social Responsibility, Banking Sector, Environmental Concern, Sustainability

1 Introduction

The present era of modernity and technological advancement is a turning point to humanity with tons of comforts, luxury, and higher standard of life along with an urgent

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alert to sustainability[2][3][8]. Today the entire corporate world is grappling with environmental concerns and adjusting strategies to handle their direct or indirect environmental impact. When the harsh realities of unbalanced ecological conditions are acknowledged, business organizations begin to change their activities, strategy, and marketing toward Green [5][9][13]. The banking industry, which is the backbone of economic development, has a greater environmental responsibility and must alter society's unsustainable economic growth pattern [19][29]. Through Green Banking efforts, the concept of being green in the banking sector has resulted in significant changes in banking operations and activities [23][30]. Green Banking combines technology, operational effectiveness, and altering consumers' habits in their banking transactions to reduce carbon footprints and promote environmentally friendly banking practices [10].

2 Literature Review

Neeraja and Joseph [12] portrays that Green Banking is a type of banking that improves minor usage of natural resources and most extreme cutback in carbon impressions and utilization of papers. Banks are progressively adopting Green Banking practices to safeguard the environment. Green banking practices is one of the developing practices in the banking sectors, which needs the most extreme awareness on clients. Through Green Banking execution, clients are doing their banking transactions in an environment-friendly manner. To embrace and enhance more Green Banking activities, banks ought to get the help of Government, business organizations, and bank clients.

Sun et al. [25] expressed that in present banking world, Green Banking initiatives have become a pervasive trend. This initiative can be taken by any bank for the prosperity of environment by implementing eco-friendly banking practices and processes to cut down the carbon footprint in banking operations. Through Green initiatives banks can upgrade their quality of services and social responsibility. With the support of Green Banking initiatives, modern banks are putting forth intensive care to promote environmental friendly banking practices by implementing innovative technologies.

Bouteraa [6] explains that Green Banking initiatives are useful for banks, society, the environment, and the economy. Green Banking initiatives are now being adopted in the UAE and principle initiatives are taken by banks to Go Green and this is emphasized in the present study. It was tracked down that in UAE, Green Banking is a basic issue and based on the findings, the banks and the government have launched significant Green steps to support it. Yet, Green Banking initiatives are a provoking assignment for banks move forward because of poor client adoption rate. Green Banking initiatives can arrive at their prosperity just through suitable training and educational programs by banks and government to the bank clients and society.

3 METHODOLOGY OF THE STUDY

This research work is descriptive in nature and explores the Green Banking initiatives undertaken by banks in Kanyakumari District. This research work comprises of both primary and secondary data. For this research work well-structured questionnaire was

constructed for bank employees consists of Green Banking initiatives taken by banks such as Green internal processes, waste management practices, Green practices and follow-up, energy conservation practices and Green funding and carbon offsets. The Likert's five-point scale ranges from 5 to 1 as 'strongly agree' to strongly disagree' is used in questionnaires to measure the responses of the respondents. The study constitutes the bank employees of Kanyakumari District and the sample technique employed to collected data from the responses is stratified random sampling method. In this research, sampling size is 334 bank employees.

3.1 OBJECTIVES OF THE STUDY

This research work has been conducted with the following objectives:

- To know the level of Green Banking initiatives undertaken in the banks.
- To identify the Green Banking initiatives in banks.

4 GREEN BANKING INITIATIVES

Green is not just a color now; but an emblem of eco-consciousness. Green in banking notifies about Green initiatives taken by banks in the banking sector. Green Banking initiatives are a tool taken by banks to verify necessary measures to rescue the environment and diminish pollution while serving or funding bank clients and upgrade in-house surrounding management through proficient and powerful utilization of resources in all the branches and head offices of banks[11][16].

- In India, various Green Banking initiatives were taken banking sector to 'Go Green'. Some of the Green initiatives taken in banks are listed as follows:[26][27][29]
- Launched Green Channel Counter (GCC) to promote paperless banking
- Granting project loans at low-interest rates to reduce carbon footprints
- Financing of solar energy projects
- Solar-powered biometric ATMs
- Installing windmills to generate Green power for bank branches
- Internet banking
- Tele-banking
- ATMs
- Adopted energy-efficient measures
- Mobile banking
- Diminished the utilization of paper and paper wastes in banking activities

5 ANALYSIS OF DATA AND INTERPRETATION

5.1 Level of Green Banking Initiatives Frequency Distribution

Level of Green Banking initiatives by public and private sector banks is showcased through frequency distribution in table 1.

Table 1. Level of Green Banking Initiatives Frequency Distribution

Level of Green Banking Initiatives	Frequency	Percentage
Low	92	27.5
Moderate	154	46.2
High	88	26.3
Total	334	100.0

Majority 154 (46.2 per cent) bank employees states the level of Green Banking initiatives are at moderate level, 92 (27.5 per cent) reveals low level of Green Banking initiatives taken in banks, whereas 88 (26.3 per cent) states high level of Green Banking initiatives taken in banks. It is evident that level of Green Banking initiatives by public and private sector banks in Kanyakumari District is at moderate level, they neither entirely nor wholly executed the Green Banking initiatives.

5.2 Green Internal Processes Analytical Description

Analytical description of Green internal processes along with their mean and standard deviation values are exposed in table 2.

Table 2. Mean and Standard Deviation of Green Internal Processes

Green Internal Processes	Mean	SD
Promoting E-statements and paperless activities	4.21	0.869
Monthly salary paid via E-payment mode	4.62	0.659
Bio-metric attendance system for employees	4.51	0.752
Bank employs electronic form instead of paper forms	3.60	1.096

Utilizing technological advancement to manage clients database	4.04	0.911
Bank handle entire document works electronically	3.52	1.195

Monthly salary paid via E-payment mode (4.62) is the foremost Green internal processes of banks in terms of Green Banking initiatives that is tracked by bio-metric attendance system for employees (4.51), and promoting E-statements and paperless activities (4.21). Banks handle the entire document works electronically (3.52) is the least considered Green internal processes by banks with respect to Green Banking initiatives that is continued by bank employs in electronic form instead of paper forms (3.60) and utilizing technological advancement to manage clients database (4.04). High consciousness of employees regarding the initiatives or practices that favors them the most, requires a smaller amount of investment, cost and time efficacious, and lucrative for banks are the reasons toward the back of monthly salary paid via E-payment mode stands the loftiest.

5.3 Waste Management Practices Analytical Description

Analytical description of waste management practices including their mean and standard deviation values are brought to light in table 3.

Table 3. Mean and Standard Deviation of Waste Management Practices

Waste Management Practices	Mean	SD
Initiative taken to provide recycled cards to customers (Debit card, Credit card, Gift card, Green card)	3.12	1.335
Employees are provided with recycled-paper visiting cards	3.03	1.343
Bank attempt to employ recycled papers and products	3.43	1.030
Bank controlling resources wastage (Water, Electricity, Paper)	3.89	0.814

The key waste management practices taken by banks as a part of their Green Banking initiatives is, bank controlling resources wastage (3.89) and thereafter bank attempt to employ recycled papers and products (3.43). Employees are provided with recycled-paper visiting cards (3.03) is the bottommost waste management practices in banks which is succeeding by initiative taken to provide recycled cards to customers (3.12).

Controlling resources wastages is simpler than utilizing pricey recycled products in banks.

5.4 Green Practices and Follow-up Analytical Description

Table 4. Analytical description of Green practices and follow-up along with their mean and standard deviation values are revealed through table 4.

Table 4. Mean and Standard Deviation of Green Practices and Follow-up

Green Practices and Follow-up	Mean	SD
Green Banking products provided to clients	4.14	0.841
Green Banking channels offered to clients	4.40	0.717
Electronic banking services are in practice (Mobile banking, Online banking, Internet Banking, RTGS/NEFT)	4.59	0.588
Green Banking Committee ensuring the Green activities of banks	3.56	1.153
Green Banking practices available in all regional languages	4.23	0.617
Communicate clients via Green communication method (Email, Mobile, SMS, ATM display)	3.78	1.113
Clients were provided E-cheque instead of paper cheque	3.06	1.291
Implemented Green building	3.08	1.214

In Green practices and follow-up, electronic banking services are in practice (4.59) is the topmost Green Banking initiatives, the very next Green Banking channels offered to clients (4.40), Green Banking practices available in all regional languages (4.23), and Green Banking products provided to clients (4.14). Clients were provided E-cheque instead of paper cheque (3.06) is the bottom level Green practices and follow-up, it is followed by implemented Green building (3.08), Green Banking committee ensuring the Green activities of banks (3.56), and communicate clients via Green communication method (3.78). Flourishing fame of electronic banking services is by means of its systematized path of delivering banking services at accessible time to bank clients to carry out transactions and bill remittance.

5.5 Energy Conservation Practices Analytical Description

Analytical description of energy conservation practices mean and standard deviation values are exhibited through table 5.

Table 5. Mean and Standard Deviation of Energy Conservation Practices

Energy Conservation Practices	Mean	SD
Installed solar powered bank ATMs	3.10	1.175
Instead of electric bulbs bank encourages to open windows for daylight	2.86	1.377
Daily courier services replaced via scans and electronic deliveries	3.01	1.395
Utilizing energy saving lights and equipments	3.80	1.072
Mass transportation system to employees for saving fuel	2.84	1.276
Installed solar panels in all branches	2.78	1.295

Utilizing energy saving lights and equipments (3.80) is the integral energy conservation practices carried out in banks, which is back-to-back by installed solar powered bank ATMs (3.10), and daily courier services replaced via scans and electronic deliveries (3.01). Installed solar panels in all branches (2.78) rated merest amidst the energy conservation practices in banks, thereafter mass transportation system to employees for saving fuel (2.84) and instead of electric bulbs, bank encourages to open windows for daylight (2.86). Banking services are available for 24 hours in a day even through ATMs, and they utilize excess electricity. Since most of the bank’s target for prolonged profit, they would obviously lean towards energy saving lights and equipment, which would offer more farseeing durability and lesser electricity charges.

5.6 Green Funding and Carbon Offsets Analytical Description

In table 6, the analytical description of Green funding and carbon offsets mean and standard deviation values are laid out.

Table 6. Mean and Standard Deviation of Green Funding and Carbon Offsets

Green Funding and Carbon Offsets	Mean	SD
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Minimize the ink usage via eco font printing through few number of printers	3.77	0.940
Bank grant subsidize purely to environmental friendly projects (use of renewable sources of energy, solar energy, bio-gas energy)	3.38	1.240
Funding vehicle loans that promises fuel efficiency	3.78	0.855
Interrupted air conditioners usage to diminish carbon footprints	2.73	1.480

Funding vehicle loans that promises fuel efficiency (3.78) is the loftiest Green funding and carbon offsets Green Banking initiatives, and immediately minimize the ink usage via eco font printing through few number of printers (3.77). Interrupted air conditioners usage to diminish carbon footprints (2.73) is the lattermost Green funding and carbon offsets initiatives and soon after bank grant subsidize purely to environmental friendly projects (3.38). Allotting funds to fuel efficacy vehicles apart from being cut the cost of finance it on the other hands contribute finance to extra people along with toning down the carbon impression.

5.7 Overall Analytical Description of Green Banking Initiatives

Analytical description, mean and standard deviation values of overall Green Banking initiatives are shown in table 7.

Table 7. Mean and Standard Deviation of Overall Green Banking Initiatives

Green Banking Initiatives	Mean	SD
Green Internal Processes	24.50	3.63
Waste Management Practices	13.47	3.57
Green Practices and Follow-up	30.82	4.76
Energy Conservation Practices	18.38	6.09
Green Funding and Carbon Offsets	13.67	3.42

While considering the overall Green Banking initiatives, Green practices and follow-up (30.82) stand as high priority initiative, Green internal processes (24.50) stands next,

and energy conservation practices comes around (18.38). Waste management practices (13.47) and Green funding and carbon offsets (13.67) were given the least priority in overall Green Banking initiatives. Bank clients consciousness regarding the value of going paperless, rapid transaction modes, and digitalization has modified the clients habits in the direction of Green practices, thus banks are urge to execute Green Banking practices and follow-up.

6 FINDINGS OF THE STUDY

- Majority 132 (45.1 per cent) bank employees states that the level of Green Banking initiatives are at moderate level. It is evident that level of Green Banking initiatives by public and private sector banks in Kanyakumari District are at moderate level, they have neither entirely nor wholly executed the Green Banking initiatives.
- Monthly salary paid via E-payment mode (4.62) is the foremost Green internal processes of banks in terms of Green Banking initiatives. High consciousness of employees regarding the initiatives or practices that favors them the most, requires a smaller amount of investment, cost and time efficacious, and lucrative for banks are the reasons toward the back of monthly salary paid via E-payment mode stands the loftiest.
- Bank controlling resources wastage (3.89) is the key waste management practices taken by banks as part of their Green Banking initiatives. Controlling resource wastage is simpler than utilizing pricey recycled products in banks.
- In Green practices and follow-up, an electronic banking service (4.59) is the topmost Green Banking initiatives. Flourishing fame of electronic banking services is by means of its systematized path of delivering banking services at accessible time to bank clients to carry out transactions and bill remittance.
- Utilizing energy saving lights and equipments (3.80) is the integral energy conservation practice carried out in banks. Banking services are available for 24 hours through ATMs, and they utilize excess electricity. Since, most of the banks target for prolonged profit, they would obviously lean towards energy saving lights and equipments, which would offer more farseeing durability and lesser electricity charges.
- Funding vehicle loans that promises fuel efficiency (3.78) is the topmost Green funding and carbon offsets Green Banking initiatives. Allotting funds to fuel efficacy vehicles apart from cutting off the finance cost too contribute finance to extra people along with toning down the carbon impression.
- While considering the overall Green Banking initiatives, Green practices and follow-up (30.82) stand as high priority initiative. Consciousness of bank clients regarding the value of going paperless, rapid transaction modes, and digitalization have modified the clients' habits in the direction of Green practices. Thus banks urge to execute Green Banking practices and follow-up.

7. CONCLUSION

There are numerous strategies to reduce banking carbon footprint and one amidst them is Green Banking initiatives in banks. In India, Green Banking initiatives are in the initial phase of execution. This research aims to know the level of Green Banking Initiatives and to identify the Green Banking initiatives undertaken by banks in Kanyakumari District. It is evident from the result that the level of Green Banking initiatives by public and private sector banks in the Kanyakumari District is at a moderate level. This is because public sector banks are not giving more priority to technological advancement. While considering the overall Green Banking initiatives, Green practices and follow-up stand as high-priority initiatives. Equal importance to all other Green Banking initiatives such as Green internal processes, waste management practices, energy conservation practices, and Green funding and carbon offsets should be given to make the banking sector environmentally sustainable.

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