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## GREEN BANKING PRACTICES IN SELECTED PRIVATE SECTOR BANKS IN CHICKMANGALUR CITY: A STUDY

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### **Abstract**

Green Banking also means promoting environment friendly practices in Banks. It is like a normal bank where all social and environmental or ecological factors for the purpose of protecting the environmental and to conserve natural resources. Green banking practices are major initiatives for the protection of environment including trees, time saving etc. In this background, the present study aims to study of Green banking practices in selected banks in Chickmagalur City. For this purpose, data is collected through 45 respondents of selected banks in Chickmagalur city. The study is made with the help of structured questionnaire for bank employees in Chickmagalur city. The intention of this study is to find out the success of Green Banking at selected private sector banks in the Chickmagalur city. The study has endowed with fair success of the Green Banking Practices in the selected study area.

**Key Terms:** *Energy Conservation Green Banking, Green Banking Practices, Green Products*

## GREEN BANKING PRACTICES IN SELECTED PRIVATE SECTOR BANKS IN CHICKMANGALUR CITY: A STUDY

### Introduction

Green Banking means encouraging environmental-friendly practices and reducing our carbon footprint from normal banking activities. Green banking will be mutually beneficial to the consumers, banks, industries and the economy. It is also called as an ethical bank or sustainable bank. They are controlled by the same authorities but with an additional agenda towards care of the Earth's environment/habits/resources. Green banking products include green loans, green mortgages, green credit cards, green saving accounts, mobile banking and online banking. Green banking includes all the bank's resources with responsibility and care, avoiding waste and giving priority to choices that take sustainability into account. Global warming, which is one of the most burning and discussed issues, has the worst impact on the climate of the planet as a whole. Due to unusual weather patterns, rising greenhouse gas, declining air quality etc. society demands that business also take responsibility in safeguarding the planet.

Green Banking is one of the revolutionary concepts in today's business world which basically refers to as sustainable banking, socially responsible banking or ethical banking whose main objective is to ensure the use of organizational resources in favor of the environment and society. Green banking is a concept of proactive and smart way of thinking with a vision for future sustainability of our only Spaceship (earth). So in a very specific way-Green Banking means banking practices that foster environmentally responsible financing practices as well as using environmentally sustainable internal processes.

*Morshed, Rubayat and Singha* explained that Green Banking can be viewed from two different approaches as follows



There is necessary to study the green banking in today's business world of innovative technologies so as to make our environment human friendly. In this background, present paper studies the practices of green banking in selected banks.



**Components of Green Banking**

The scope of Green Banking is huge- leading to the way of Green Economy in a broad sense. So determining all the components of Green Banking is a difficult task. However, the following can be a short checklist of the components of Green Banking.

○ Online Banking	○ Green accounts(ATM Services)
✓ Paying Bills Online	○ Green Financing
✓ Remote Deposit	○ Power saving equipment
✓ Online Fund Transfer	○ Green Debit Cards/Credit
✓ E- Statements	○ Save Paper
✓ Automated Clearing House	○ Mobile Banking

Although the concept of Green Bank is considered as a sustainability issue it is true that achieving the actual response of Green Banking initiatives is associated with some major challenges like diversification matters, Startups banks, Banks are “Specialized”, higher operating expenses and costs, Reputation Risk etc.

**Literature Review**

**Suresh Chandra Bihari and BhavnaPandey (2015)** in their article “*Green Banking in India*” studied the green bank, the steps required to adopt green banking and to create the awareness of green banking among employees who working in banking sectors. Financial analysis is done through profit and loss account of SBI, Punjab National Bank, Bank of Baroda, Karnataka Bank, Yes Bank, IDBI Bank, Central Bank of India, Axis Bank and also calculating Net profit of both Public banks, Private sector banks. The conclusion reveals that if Indian market desire to enter global markets, it is important that they recognize their environmental and social responsibilities. Indian banks need to set their near term and long term green goals, develop their green strategies and execute their greening activities in a phased manner. This concept of “Green Banking” will be mutually beneficial to the banks, industries and the economy. Not only “Green Banking” will ensure the greening of the industries but it will also facilitate in improving the asset quality of the banks in future.

**Mohammad et.al.,(2014)** in their article “*An Evaluation of Green Banking Practices in Bangladesh*” aim to analyze the Green Banking practices among SCBs, SDBs, PCBs and FCBS in Bangladesh. The investigation finds that 47 banks have received the Green Banking strategy, framed Green Banking Unit, apportioned and used spending plan for green saving money. However, the designation and usage of spending plan of SCBs and SDBs are not agreeable. The best purpose behind not to embrace Green Banking maybe is that it regularly requires an extensive beginning expense. As SCBs and SDBs are a long ways behind to receive web based keeping money and ATM offices, our legislature ought to give enough store and specialized help to them. Bangladesh Bank ought to uphold SCBs, SDBs, PCBs and FCBS, that they ought to evaluate the delicate issues like helpless gatherings; automatic uprooting and so forth while contributing or subsidizing the ventures.



**Vijay and Sangepu (2013)** in their paper “Green Banking Services For Sustainability” examined the idea of green saving money in managing an account part, to know the developing pattern of the green keeping money in India and furthermore to know the distinction between the manual and electronic exchanges are to be neglected and furthermore to know the new idea called green saving money and its advantages. The improvements in the green managing an account industry is examined as for extension of branches, usage of computerization at various levels, opening of ATMs and other green saving money administrations were made to comprehend the present status of Green Banking in India with the assistance of an exploratory research. The inquire about uncovers how these administrations are useful in fulfilling the clients by diminishing their lining time for their exchanges in the bank, venturing out time from home to bank, sparing the movement time and using that time for other imperative exercises.

**Md. Sharif, Md. Tanvir (2014)** in their paper “Green Banking Nexus Banks’ Performance” intended to ponder the effect of green putting money on bank's execution utilizing cross segment information of 45 banks in the year 2012. The examination utilizes six unique factors to be specific credits and advances, stores and different records, paid-up capital speculations, green keeping money, and benefit after assessment are considered. The consequence of examination demonstrates that green saving money has critical positive effect and INV has noteworthy negative effect on banks' execution.

### Objectives of the Study

- To analyses the green banking practices introduced by the selected banks and
- To find out the success of green banking practices in the study area

### Working Hypotheses:

H<sub>0</sub>: There is no significant difference among banks with respect to green banking products

H<sub>1</sub>: There is a significant difference among banks with respect to green banking products

H<sub>0</sub>: There is no significant difference among satisfaction level on green banking facilities

H<sub>1</sub>: There is a significant difference among satisfaction level on green banking facilities

H<sub>0</sub>: Success rate of green banking practices in bank is having 51% in selected banks

H<sub>1</sub>: Success rate of green banking practices in bank is not having 51% in selected banks

### Scope of the Study

The current study mainly focuses on impact of green banking and its success of in selected private sector banks (Karnataka Bank, Axis Bank and HDFCBank) of Chickmagalur city. Success of green banking is measured in terms of usage of green banking products, satisfaction of bank employees in green banking practices to conserve green and bank employees' opinion on utility of green banking products.

### Sources of Data Collection

This paper depends both on primary and secondary sources of data. The Primary data collection is made through a structured questionnaire and personal contact with bank employees at Chickmagalur city and Secondary sources of data were collected from various journals, magazines and e-sources.

### Sample Design

The present study considers a total of 45 employees (15 employees from each bank) of selected banks. Simple Random Sampling technique is used for drawing sample. Bank employees are the sample unit.

### Survey Period

The study was conducted from June to August 2018

### Limitations of the Study

The present study has certain shortcomings which are mentioned below:

- This paper has concentrated only on selected private sector banks of Chickmangalur city
- Responses of bank employees may be skewed to boost the image of the banks
- Sample size considered in the study is too small

### Statistical Tools for Analysis

For the present study Sandler's A test, Analysis of Variance and some descriptive statistics are used for the purpose of analysis and interpretation.

**Table- 1: Demographic profile of respondents**

Age	No. of Respondents	Percentage
25-30	8	13
31-40	28	62
41-50	6	18
Above 50	3	7
Total	45	100
Qualification		
Graduation	26	58
Post-Graduation	18	40
Others	1	2
Total	45	100
Type of area		
Urban	24	53
Semi-urban	12	27
Rural	9	20
Total	45	100
Designation		
Clerk	11	24
Probationary Officer	18	40
Specialist Officer	8	18
Assistant Managers	5	11
Branch Manager	3	7
Total	45	100

**Source:** Primary Data

The above table explains the age group in which the respondents fit into. Majority of the respondents (62%) fall in the age group of 31 – 40, 18% fall under age group of 41-

50, 13% come under 25-30 age group and 7% belongs to above 50 age group. This shows a normal distribution of workers aged in the selected banks. The above table portrays the educational qualification of the respondents. More than 55% of the respondents have graduation, followed by 40% post graduates. The above table covers the area in which the respondents belong in the study area. More than half of the respondents are from Urban, followed by Semi-Urban and Rural in the respondent profile. The above table explains that 40% of the samples are probationary officers, 24% are clerks, 18% are specialist officers, 11% assistant managers and 7% branch manager. The sampling has taken a best effort to maintain the banking ratio with respect to the ratio of employees in the different cadre.

### Hypotheses Testing

**Table – 2: Green Products Availability in selected banks**

Green Products	Karnataka Bank	AXIS Bank	HDFC Bank
Green Mortgages	11	9	7
Green home loan	12	5	5
Green commercial building loans	9	3	1
Green car loans	3	0	1
Green cards	6	3	4
Green project finance	14	8	7
Green insurance	3	0	0
Providing e-statements	15	15	15
Net banking	15	15	15
Interactive Voice Response	3	1	0
Online bill payments	15	15	15
Plastic money	14	11	12
Real Vision Imaging	5	1	1
Mobile Banking	15	15	15

**Source: Primary Data**

H<sub>0</sub>: There is no significant difference among banks with respect to green banking products

H<sub>1</sub>: There is a significant difference among banks with respect to green banking products

**Table - 3: ANOVA (Two Factor) Output**

Anova: Two-Factor Without Replication						
<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>		
Green Mortgages	3	27	9.00	4.00		
Green home loan	3	22	7.33	16.33		
3) Green commercial building loans	3	13	4.33	17.33		
Green car loans	3	4	1.33	2.33		
Green cards	3	13	4.33	2.33		
Green project finance	3	29	9.67	14.33		
Green insurance	3	3	1.00	3.00		
Providing e-statements	3	45	15.00	0.00		
Net banking	3	45	15.00	0.00		
Interactive Voice Response	3	4	1.33	2.33		
Online bill payments	3	45	15.00	0.00		
Plastic money	3	37	12.33	2.33		
Real Vision Imaging	3	7	2.33	5.33		
Mobile Banking	3	45	15.00	0.00		
Karnataka Bank	14	140	10.00	25.08		
AXIS Bank	14	101	7.21	37.10		
HDFC Bank	14	98	7.00	38.46		
ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	1247.45	13.00	95.96	40.96	0.00	2.12
Columns	78.43	2.00	39.21	16.74	0.00	3.37
Error	60.90	26.00	2.34			
Total	1386.79	41.00				

**Interpretation:** The above tables explain the presence of green banking products in the selected private sector banks. The ANOVA table tells, there is a significant difference between at least two or more banks and at least two or more green banking products at 5% significance level. Which means all the three banks differ significantly when compare to each other. Similarly there exists a significant difference between green banking products among each other.

**Table – 4: Opinion on Customer Satisfaction on facilities at Selected banks**

Facilities	Highly Satisfied	Satisfied	Neutral	Dissatisfied	Highly Dissatisfied
Green Mortgages	24	14	5	1	1
Green home loan	30	15	0	0	0
Green commercial building loans	8	7	9	16	5
Green car loans	6	6	18	12	3
Green cards	5	9	7	11	13
Green project finance	6	6	7	11	15
Green insurance	3	4	6	16	16
Providing e-statements	26	12	5	2	0
Net banking	29	16	0	0	0
Mobile banking	30	13	2	0	0
Online bill payments	27	15	2	1	0

**Source:** Primary Data

$H_0$ : There is no significant difference among satisfaction level on green banking facilities

$H_1$ : There is a significant difference among satisfaction level on green banking facilities

**Table – 5: ANOVA Output (Single Factor)**

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
Highly Satisfied	11	194	17.64	137.05		
Satisfied	11	117	10.64	18.85		
Neutral	11	61	5.55	25.87		
Dissatisfied	11	70	6.36	45.85		
Highly Dissatisfied	11	53	4.82	42.96		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	1250	4	312.5	5.774205	0.00067	2.557179
Within Groups	2706	50	54.12			
Total	3956	54				

**Interpretation:** The above tables enable to know about the satisfaction level of customers' through employees of the banks. The ANOVA one way is used to check whether there is any significant difference among the satisfaction levels of customers in the context of green banking products. The test result display that there is a significant difference among the satisfaction level at 5% in terms of green banking products.

**Table – 6: Opinion on the outcomes of Green Banking system on customer’s daily life**

Effects of green banking	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Weighted Average	Rank
Reduces paper work	34	11	0	0	0	1.76	3
Saves time	36	9	0	0	0	1.80	1
Conserve energy	26	16	3	0	0	1.51	7
Easy tracking of transactions	13	12	6	12	2	0.49	10
Record keeping	33	11	1	0	0	1.71	4
24 hours access to your account	37	6	2	0	0	1.78	2
Customer friendly banking	29	16	0	0	0	1.64	5
Easy to transact	28	13	2	2	0	1.49	8
Remittance at any time	19	16	9	1	0	1.18	9
Easy carry of cash	35	5	3	1	1	1.60	6

**Source:** Primary Data

**Interpretation:** The above table describes the outcome of usage of green banking products in their daily life. Respondents’ opinion is measured in a five point scale and weighted average is calculated to see the measure of central tendency on every outcomes. Later the outcomes are ranked using the weighted average as the parameter. As per the result the first place is conquered by time saving, followed by 24 hours access to account, reduction in paper work, record keeping, customer friendly banking, easy carry of cash, conserve energy, easy to transact, remittance at any time and easy tracking of transaction.



**Table – 7: Green banking practices are executed in your branch.**

Green Banking Practices	Frequency	Hypothesised Mean	D <sub>i</sub>	D <sub>i</sub> <sup>2</sup>
Controlled use of energy	37	22.95	14.05	197.40
Reduce wastage of papers and energy through internet banking	42	22.95	19.05	362.90
Solar ATMs	4	22.95	-18.95	359.10
Providing recyclable debit/credit card	21	22.95	-1.95	3.80
Usage of recycle paper or recycle waste	38	22.95	15.05	226.50
Cash deposit machine	39	22.95	16.05	257.60
Energy saving bulbs	45	22.95	22.05	486.20
In and around plantations	10	22.95	-12.95	167.70
Use of solar panels and wind mills	3	22.95	-19.95	398.00
Additional incentives for employees using energy efficient vehicles, lighting systems, solar energy etc	1	22.95	-21.95	481.80
Using LEED-India/IGBC certified building	5	22.95	-17.95	322.20
Conduct Tree plantation programs	28	22.95	5.05	25.50
Rain Water Harvesting	12	22.95	-10.95	119.90
Recycled furniture	3	22.95	-19.95	398.00
	288		∑ D <sub>i</sub> = -33.30	∑ D <sub>i</sub> <sup>2</sup> = 3806.64

Source: Primary Data

H<sub>0</sub> : μ = 22.95 (Success rate of green banking practices in bank is having 51% in selected banks)

H<sub>1</sub>: μ ≠ 22.95 (Success rate of green banking practices in bank is not having 51% in selected banks)

Test statistic is Sandler’s A

$$A = \frac{D_i^2}{(D_i)^2}$$

$$A = \frac{729}{-27^2} = 3.43$$

Critical Value for 5% Significance level and 13 degrees of freedom = 0.368

Calculated Value = 3.43

**Conclusion: Null hypothesis is accepted**

The above testing brings out the success level of green banking concept in the private banks in the Chickmagalur city. As the calculated value is 3.43 is more than the critical value 0.368 for 13 degrees of freedom and at 5% significance level, null hypothesis is accepted. This means the green banking concept has achieved 51% of success in the study area.



## Major Findings of the Study

- It is found that majority of the respondents fall in the age bracket of 31-40. This can be interpreted as, middle age group contribute more in the banking sector where they are not too new to system to take time to understand nor too old to be complaisant
- Graduation and Post-graduation are the mostly preferred qualification in the banking sector. This has been extensively practiced in the Indian banking industry. As a result most graduates and post graduates were found in the sample selected
- In terms conducting banking activities, banks have extended their wings to even rural areas. This is very much evident with 20% shared in the respondent profile
- In the context of designation banks follow basic ratio and it has been almost replicated in the selected sample.
- With respect to green banking products in selected banks, providing e-statements, net banking and mobile banking occupies the first three places. Karnataka Bank gets the more score in terms of using green banking products when compared to Axis and HDFC. The results say that there is a significant difference in providing green banking products to customers among three banks. It is also noted that there exist a noteworthy differences among the green banking products too.
- Employees' opinion on customer satisfaction on green banking products also witnesses a significant difference among the satisfaction level. This may be caused due to inadequate promotions of the products, lack of awareness of uses and importance of green products, inefficient employees, lack of motivation to customers to use green banking products, high pricing, so on and so forth.
- In relation to the opinion of customers on the outcomes of green banking products in their life, first place is conquered by time saving, followed by 24X7 access to account, reduction in paper work, record keeping, customer friendly banking, easy carry of cash, conserve energy, easy to transact, remittance at any time and easy tracking of transaction. Thus it can be understood that the green banking products are saving the time of customers, provide continuous access and reduce paper work which is the most significant.
- With respect to ancillary green banking practices carried over by the banks, it is found that the banks have a success ratio of 51% in the selected banks. This ensures that the green banking concept is still in its nascent stages but it has also shown a considerable success rate in the private sector banks in the Chickmagalur city.

## Suggestions

- ✚ As it is found that relatively more green banking products found only in Karnataka Bank, it is advisable to Axis and HDFC to put up more product lines and extend the same because already Karnataka Bank has proved its success in the domain.
- ✚ Only in certain products, employees feel that the customers are satisfied, like Green Mortgages, green home loan, e-statements, net banking, mobile banking and online bill payments. Still the banks has huge scope to enhance the satisfaction on the customers in terms of green commercial buildings, green car loans, green cards, green project finance and green insurance.
- ✚ The basic purpose of green banking concept is been achieved as the findings says time is saved, continuity is access to account and less paper work. However, the



banks has further more areas to be improved like record keeping, customer friendly banking, easy carry of cash, conserve energy, easy to transact, remittance at any time and easy tracking of transaction.

- ✚ Banks are not only enforcing customers to do business with banks in an ecofriendly way but also it has various options in which bank alone can make the planet green by few ancillary practices like Controlled use of energy, Reduce wastage of papers and energy through internet banking, Solar ATMs, Providing recyclable debit/credit card, Usage of recycle paper or recycle waste, Cash deposit machine, Energy saving bulbs, In and around plantations, Use of solar panels and wind mills, Additional incentives for employees using energy efficient vehicles, lighting systems, solar energy etc, Using LEED-India/IGBC certified building, Conduct tree plantation programs, Rain water harvesting and Recycled furniture. In which the banks have achieved a success rate of 51%. Still banks shall strive hard to have a better conversion in future.

### Conclusion

Green banking has become a buzz word in the banking industry from the past decade. Many ecologists have contributed to this concept to save the green color in the planet and avoid catastrophic events in future. As banks are the major link between accumulation of funds and dissemination of funds, banks can channelize the funds to promote Clean Development Mechanism (CDM) projects where in it can carry out the banking business and save the planet from mishaps as well. The concept of green banking is conceived by most of the banks but practiced very rare. The intent of this study is to find out the success of this concept among private sector banks in Chickamagalur city. The study upholds the facts that the selected banks in the city have achieved considerable accomplishments. But it is not very much sufficient to skip the danger ahead and the banks have to act on a war footing basis bring up massive changes in the environment.

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