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# A study on green banking initiatives of selected private and public sector banks in chittoor (dt.), andhra pradesh

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# **Abstract**

In recent years, climate change and global warming have become major issues in environmental protection. To protect the environment many organizations worldwide adopt green practices to control both climate change and global warming. In this context, the banks also started the green banking concept to protect the environment. They are initiated by saving energy, reducing paper usage, etc. This paper explores the initiatives undertaken by the banking sector in India under the green banking bucket. green banking means commercial banks trying to save natural resources and reduce the carbon footprint from banking activities. It promotes eco-friendly practices in finance. It drives the banks to practice new methods and use IT and physical infrastructure as competent and operatively as possible, with zero or minimal impact on the environment. The concept of Green Banking and its practices is not only mutually profitable to the economy, banks, and industrial sectors but also supports restoring the planet from global warming and climate change. This study finds that both public and private banks are now using online banking, mobile banking, and energy-saving methods in their services and giving awareness to their customers.

Keywords: Green Banking, Public Sector Banks, Private Sector Banks, Eco-friendly practices.

## 1. Introduction

The banking sector is one of the major sources of financing industrial projects like cement, chemicals, steel, paper, fertilizers, etc., which cause maximum carbon emissions. Banks are also considering environmental degradation which affects the entire world, so they have started adopting eco-friendly practices. Green banking promotes sustainable environmental development and protects natural resources for future generations. Green banking practices help reduce energy consumption and control the emission of carbon footprints into the environment. Green banking is a new phenomenon in the banking industry. Banks play a major role in countries' economic development and in promoting sustainable activities. Green banking is also known as eco-friendly banking. In recent times the ecological balance has damagingly affected humans and their surrounding environment. This in turn has raised the importance of green banking. Green Banking initiatives of banks are measured as one of the tools, that ensure sustainable development, and help to lessen the use of carbon blueprints in the banking industry. Green banking reduces the use of paper and depends on online banking and mobile banking. Some banks use solar power to save energy. They are encouraging green credit cards etc. Both the public and private banks have started to implement the three R's concept which is Reduce, Reuse, and Recycle. Green banking will benefit the environment as well as people. Customers have also started using online banking, mobile banking, and ATMs instead of visiting the banks for their financial transactions.

#### REVIEW OF LITERATURE:

M. Narayanan and Dr. S. Chandrasekaran (2022) in their study on Green banking initiatives: A comparative analysis of public sector and private sector banks in India with reference to Tamil Nadu. The objectives of the study are the initiatives taken by both public and private banks and customer awareness towards green banking. The researchers concluded that both public and private sector banks have implemented green banking practices like online banking and mobile. banking etc. Customers have started to use online banking and it helps them in saving their money and time.

Dr. Krishnendu Ghosh (2022) researched Green initiatives in the banking sector in India. The study states that the banking sector has taken green initiatives in reducing the carbon footprint, maintaining ecological balance, etc. to achieve sustainability. This paper also states that the Indian banking sector is still in the initial stage of practicing green banking initiatives.

Dr. S. Karthikeyan & Dr. R. Janakiraman (2021) had done a study on Green banking in India – An overview. This study concludes that if green banking is implemented sincerely, it would open new markets and paths for product differentiation.

Meenakshi Sharma and Akanksha Choubey (2021) Green banking initiatives: A qualitative study on the Indian banking sector. This study explains that most public and private sector banks are implementing green banking initiatives in the form of green product developments, encouraging people towards green initiatives by providing loans for green projects, reducing energy consumption in banks, starting solar ATMs, etc.

G. Sneha (2021), A study on green banking initiatives adopted by public and private banks in India. The objective of the study is to know the initiatives taken by banks like SBI, Bank of Baroda, Axis Bank, and Kotak Mahindra Bank and to know the consequences of green banking. This study concludes that green banking will be mutually beneficial to the banks and customers.

Kavita S. Vadrale and Dr. V.P. Katti (2020) had done research on green banking initiatives by Indian public and private sector banks. The main purpose of the study is to evaluate the use of green banking practices in the banking sector and to compare the initiatives taken by public and private banks towards going green.

Kishore Kumar and Ajay Prakash (2019) conducted a study on the examination of sustainability reporting practices in the Indian banking sector. This study explains that the banks in India are much slower in adopting sustainability reporting practices.

GREEN BANKING PRACTICES ADOPTED BY VARIOUS PUBLIC AND PRIVATE SECTOR BANKS IN ANDHRA PRADESH

State Bank of India

SBI launched the Green Chanel Counter on 1st July 2010 as an initiative and innovative step of green banking. GCC is available in 7052 branches and the average number of daily transactions through it is more than 100000. The SBI has installed Solar. It is the largest deployer of solar ATMs and saves more than 2000 tons of CO2 per year ATMs. The bank gives project loans at a concessional rate of interest to encourage the reduction of greenhouse gases by adopting efficient manufacturing practices.

#### Bank of Baroda

As a part of green initiatives, the Bank of Baroda has undertaken optimum technology utilization such as Windows server virtualization, desktop virtualization, and backup consolidation, improved data centre operational efficiency, application virtualization, Automatic Storage Management and real Application Clusters Implementation, Bandwidth up-gradation, provision of backup link and use of new technology based on MPLS (Multi-Protocol Label Switching). The Bank gives preferential treatment for eco-friendly green projects such as Windmills/Solar Power projects and earns carbon credits. Multiple awareness campaigns were conducted by the bank to boost/increase exposure to green banking. As part of it bank has conducted debates, essay competitions, painting competitions, etc for bank staff, staff children, and various school children. Moreover, the bank also supports for clean environmental activities of NGOs.

## Canara Bank

Canara Bank came forward to take the first step to introduce paperless banking and stands as an easy-go financer for solar energy-related projects. The Bank has introduced several environment-friendly measures, viz., core banking solutions, internet banking, telebanking, mobile banking, ATMs, solar-powered biometric ATMs for the use of rural folk, and certain back-office operations. Canara Bank is the highest financier for solar energy projects. Canara Bank is also encouraging green products by providing loans to their customers.

ICICI Bank

ICICI Bank has set up fully electronic branches where the customers can conduct all their banking transactions themselves. Bank insists their customers about online banking, online bill payments, and fund transfers and encourages e-statement. Bank has sent nearly 200 thousand annual reports in electronic form and banks have saved more than 60 tons of paper in the last year by sending e-statements to their bank account customers and credit card customers. ICICI Bank is encouraging its customers to use eco-friendly vehicles by providing loans with discounts on processing fee. The bank also reduced processing fee on home loans who are purchasing green buildings.

#### HDFC Bank

HDFC Bank has uninterruptedly undertaken green procurement, efficient lighting solutions, optimized travel planning, reduced paper consumption, etc. to reduce its environmental footprint. It started to send ATM PIN numbers and unique code numbers through SMS instead of posting a paper document. Bank has encouraged online banking, and mobile banking to support paperless banking. Bank has installed solar power ATMs that use rechargeable lithium-ion batteries for continuous power supply. Bank managed their wastage by collaborating with vendors for recycling of paper and other materials. They also use reusable cups and plates in their offices. Bank has using electronic media for communicating with customers instead of print communication.

#### Axis Bank

Axis Bank has hurled the tree plantation program and planted one lakh seedlings over thousands of places. This bank mostly concentrates on energy saving and reducing GHG gas emissions. This bank implemented the three R's concept that is Reduce, Reuse, and Recycle. Bank has implemented sustainable loaning practices without obtaining consent from pollution control authorities" The bank does not finance pollutant industries and insists on installing effluent treatment plant.

## Objectives of the study:

- 1. To know the green banking initiatives taken by the public and private sector banks.
- 2. To study customer awareness towards green banking practices adopted by both public and private sector banks.
- 3. To compare the initiatives which are taken by public and private banks.

## 2. Research methodology:

The study is a descriptive research study and uses primary and secondary data. The primary data for the study is collected from 120 respondents through a structured questionnaire. Respondents are selected from a non-probabilistic convenience sampling method and the respondents are mostly from Chittoor district. The Mann-Whitney U-Test and Chi-square method is used to analyse the data.

#### **HYPOTHESIS**

Hypothesis 1: there is no significant difference between the green initiatives taken by both the public and private sector banks.

Hypothesis 2: there is no relation between public and private sector bank customers in utilizing green banking services.

## 3. Data analysis:

The initiatives which are adopted by various public and private sector banks are given in Table No.1

Table No:1 Green Initiatives

Initiative			
11	Online banking		
12	Mobile banking		
13	E-statement		
14	Reducing the use of paper and energy		
15	Using solar power ATMs		
16	Using recycled paper		
17	Waste management		
18	Green Insurance		
19	Green loans		
110	Providing recyclable cards		
111	Providing awareness to customers		

Different initiatives taken by both public and private sector banks are analyzed in Table No. 2 Here the Whitney U-Test is used for analysis of the data.

Table No:2Results of Mann Whitney U-Test

Initiative	Type of bank	N value	Mean Rank	Statistical results
1	Public	55	65.92	M.W.U. test =1929.00
	Private	65	72.92	p-value = 0.250
12	Public	55	73.16	M.W.U. test =1917.00
12	Private	65	65.79	p-value = 0.222
13	Public	55	67.34	M.W.U. test =2029.00
15	Private	65	69.17	p-value = 0.757
14	Public	55	73.69	M.W.U. test =1929.00
14	Private	65	65.48	p-value = 0.250
15	Public	55	72.65	M.W.U. test =1890.00
13	Private	65	66.09	p-value = 0.206
16	Public	55	70.99	M.W.U. test =2025.00
10	Private	65	67.01	p-value = 0.516
17	Public	55	71.22	M.W.U. test =1953.00
17	Private	65	68.12	p-value = 0.344
18	Public	55	72.65	M.W.U. test =1942.50
10	Private	65	66.09	p-value = 0.285
19	Public	55	70.03	M.W.U. test =2059.00
13	Private	65	66.97	p-value = 0.668

110	Public	55	63.22	M.W.U. test =1936.00
	Private	65	71.45	p-value = 0.254
l11	Public	55	74.26	M.W.U. test =1862.00
	Private	65	65.35	p-value = 0.143

The above table shows the analysis association of green initiatives which are adopted by public and private sector banks. In the above analysis, the p-value is greater than 0.05 statistical significance level in all the cases. So, the null hypothesis is accepted. That means there is no relationship between public and private sector banks in adopting green banking initiatives. Both public and private sector banks are giving importance to adopting green banking practices.

Some of the green initiatives are taken and the level of awareness in the customers towards them. This analysis is done for both public and private sector banks. Here  $\chi^2$ -test is used for analyzing the data.

Table No.3 Results of the Chi-Square Test

S No	Initiative	Type of Bank	Following	Not Following	Statistical Results	НО
1	Online banking	Public	32	23	$\chi$ 2 = 2.64, P = 0.10	Accepted
	Offille balking	Private	47	18		
2	Mobile banking	Public	25	30	$\chi$ 2 = 3.10, P = 0.08	Accepted
	Mobile banking	Private	40	25		
3	C atatamant	Public	27	28	$\chi$ 2 = 7.79, P = 0.005	Rejected
	E-statement	Private	48	17		
4	Using of ATMs	Public	37	18	$\chi$ 2 = 1.39, P = 0.24	Accepted
	USING OF ATMS	Private	50	15		
5	Using recycled paper	Public	30	25	χ2 = 0.599, P = 0.44	Accepted
	Using recycled paper	Private	40	25		
6	Green loans	Public	27	28	χ2 = 0.02, P = 0.88	Accepted
	Green loans	Private	31	34		
7	Providing recyclable	Public	20	35	$\chi$ 2 = 1.68, P = 0.19	Accepted
	cards	Private	35	30		

The above table explains the analysis of customer's usage of green practices in both public and private banks. In the above analysis, the null hypothesis is accepted in all the cases except taking estatements from the banks.

Public and private bank customers are utilizing online banking facilities equally. Both sector bank customers have also started using mobile banking.

In taking e-statements private bank customers are farther away than public bank customers. public sector and private sector bank customers are using ATMs more frequently without any difference. Both bank customers are using recycled paper.

Both public and private banks are encouraging their customers by providing loans. They also provide recyclable cards to their customers.

## 4. Findings

Public and private sector banks have continuously thrived in initiating green practices. All the banks are now implementing green practices. Both the sector banks have successfully implemented online banking, mobile banking, using ATMs. Both public and private sector banks are also reducing energy consumption. Private banks are headfirst in giving e-statements to their customers than public banks.

The banks are also using solar power ATMs to reduce energy consumption. Public and private sector banks are also educating their customers about sustainability and eco-friendly practices and encouraging them to go green. Both sector banks motivate their customers by providing loans to them for using eco-friendly vehicles, purchasing green buildings, etc.

### 5. Conclusion

Present environmental conditions across the globe made people realize the importance of ecofriendly practices. Going green is very much needed in all the sectors. To reduce carbon footprints the banking sector also initiated green practices. Both the public sector and private sector banks have taken initiatives and implemented them in their offices. Banks have the responsibility to provide awareness to their employees and customers about green banking. The banks are already providing online banking, mobile banking, and ATM services to their customers, but these services are utilized by 50% of the customers only. The banks must encourage remaining customers also to adopt modern banking or green banking. This study found that there is no significant association between public and private sector banks in taking green initiatives and customer awareness towards green banking with respect to Chittoor District, Andhra Pradesh. This study found that both public and private sector banks are implementing online banking, mobile banking, and ATM services. These services will save time for employees of the bank as well as customers. They also use energy reduction techniques in their offices. A tiny stride by banks to Go Green in banking and a little effort by clients to utilize Green Banking provide a massive change in environmental sustainability. Other results of the study show that private sector banks are a step ahead in providing e-statement services to their customers than the public sector. Awareness about Green Banking among the various age groups of customers is not similar. The banks must educate and motivate them to go green.

## **References:**

- 1. Afroz, N. N. (2017). Green banking initiatives of Islamic Bank Bangladesh Limited. Global Journal of Management and Business Research, 17(1).
- 2. Jain, H., & Jatana, R. (2017). Green banking: A study on customer's awareness in public and private sector banks. Mohanlal Sukhadia University.
- 3. Barhate, G. H., & Tamboli, M. A. (2016). Green banking: An overview. IBMRD's Journal of Management & Research, 5(2), 49-52. https://doi.org/10.17697/ibmrd/2016/v5i2/100480

- 4. Chadichal Shilpa and Dr Misra Sheelan (2016). Exploring Web-Based Seroquel Dimensions in Green Banking Services Impact on Developing e-CRM. Asia Pacific Journal of Management and Entrepreneurship, 1 (3), 285 312.
- 5. Rambalak Yadav, Govind Swaroop Pathak (2013) in his article entitled on "Environmental Sustainability Through Green Banking: A Study on Private And Public Sector Banks in India". Ontario International Development Agency ISSN: 1923-6654
- 6. Ravi Meena (2013) in this research paper entitled "Green Banking: As Initiative for Sustainable Development" Global Journal of Management and Business Studies, ISSN 2248-9878 Volume 3, Number 10 (2013), pp. 1181-1186
- 7. Bahl, S (2012). The Role of Green Banking In Sustainable Growth. International Journal of Marketing, Financial Services and Management Research, Vol. 1 no. 2. Feb. 2012.
- 8. Dr. Jha Nishikant and Bhome Shraddha (2013). A Study of Green Banking Trends in India. International Monthly Refereed Journal of Research in Management & Technology, 2, 127 132