

## **“Exploring Customer Awareness of Green Banking Initiatives in Karnataka: A Comprehensive Study on Public and Private Sector Banks”**

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### **ABSTRACT**

The paper aims at identifying and understanding the extent of knowledge and attitudes towards green banking activities among bank customers in Karnataka with a special reference to the public and private sectors. In this study, which is conducted through a structured questionnaire given to 500 customers through stratified random sampling, the research finds out that there is only a fair level of awareness of green banking strategies, with 62% of the participants indicating their awareness. However, there is a significant difference between the customers of the public and the private sector banks, where 70 % of the private sector banks' customers are aware of the scheme compared to 54 % of customers of the public sector banks. On the issue of awareness, education level proved to be a significant factor whereby individuals with higher education levels had a better understanding of the risks, information available, and usage of online banking. The advantages of green banking according to the respondents include the impact of green banking on the environment (75% agreed), ease of conducting transactions through digital platforms (68% agreed), and cost-cutting from aspects such as the use of less paper and reduced branch visits (55% agreed). Difficulties mentioned are lack of information (40%), technical issues (30%), and security issues associated with online payment (25%). Proposed measures to tackle these findings include widespread public sensitization, improvement of Internet banking services, and promotion of green banking through policy incentives and public-private partnerships between the government and nonprofit organizations. In conclusion, the research highlights the need for the formation and development of sustainable banking and promoting environmental sustainability in the banking sector.

**Keywords:** Green banking, Customer awareness, Sustainable development, public sector banks, Private sector banks, Karnataka

### **INTRODUCTION**

Green banking refers to the steps that banking institutions are willing to undertake to support sustainable activities and environmentally responsible practices in their business. Some of the environmental measures include going green through e-banking, encouraging the use of electronic media in conducting business, sponsoring green projects, and implementing environmental compliance in the company. Digital banking does not require the use of branch outlets; hence, there is no need for traveling and the use of energy and pollution in the construction and maintenance of the banks (Bahl, 2012). Consumers have been urged by banks to refrain from making paper-based transactions to reduce paper usage hence contributing to the conservation of forests and reduction in carbon emissions used in paper production and disposal (Jain & Soni, 2019).

Environmentally sustainable financial management is the act of providing financial to projects that have positive environmental impacts such as funding for renewable energy, green buildings, and sustainable agriculture among others. This not only encourages the establishment of green industries but also the further green conversion of industries (Reddy & Chary, 2021). These internal environment policies may include energy conservation and efficiency in the use of energy in the banks such as energy used in sources of light and the use of energy-efficient appliances, wastage control, and the use of environmentally friendly products.

### 1.1 Importance of the Study

The state of Karnataka is one of the progressive states of India and that makes this place appropriate for researching green banking awareness and its adoption. The real-life example of Karnataka's economy is also diverse with both the urban and rural areas making it easier to see how green banking can be developed and the reception it will get from the consumers. Moreover, Karnataka state has more numbers of major public and private sector banks; therefore, the study can compare the effectiveness and consequences of green banking strategies both in public and private sector banks.

This awareness is crucial in helping banks to respond appropriately to the needs of the customers, which will enable them to advance their strategies and in turn, contribute to the achievement of the sustainable development goals. Green banking innovations allow customers to be much more informed and be part of the change. When the customers have a full understanding of the advantages of practicing green banking, they will be able to adopt them thus improving the effectiveness of these measures (Sharma & Singh, 2018). In addition, customer awareness implies that consumers prefer green financial products and services, which then forces the banks to develop better green offerings. Thus, it is important to note customer awareness in Karnataka to determine the factors that can enhance or hinder the uptake of green banking. It is therefore important for the banks to identify the demographic factors of the customers, the availability and access to information, and the communication channels that can be used to facilitate awareness of green banking (Bahl, 2012). If viewed from the customer's side, the perceived benefits and challenges may be used to counter specific concerns, improve services in the banking sector, and enhance customer satisfaction. In addition to the benefits that are apparent in the banking sector and among consumers, the promotion and use of green banking can also have other benefits such as environmental and economic. This is a policy that embraces the concept of sustainable development through the encouragement of environmentally friendly activities, reduction of carbon footprint, and offering of financial support to green initiatives. All these efforts comply with the national and international sustainable development goals such as United Nations Sustainable Development Goal 7 (UNSDG 7) for clean energy and United Nations Sustainable Development Goal 13 (UNSDG 13) for climate change as noted by Jain and Soni (2019).

Therefore, it is important to assess the level of awareness customers in Karnataka have of green banking initiatives to know how to go about implementing the green banking initiatives. Therefore, the knowledge of the customers' perceptions and subsequent behaviors will assist in enhancing the banking industries' strategies, especially when addressing sustainable development goals and moving towards a more sustainable economy.

### 1.2 Aim

The study aims to examine the level of awareness that consumers in the Karnataka region have towards green banking practices among the public and private sector banks. This paper aims to determine the extent of knowledge on the subject, establish factors that may have an impact, and perceived benefits and barriers. Therefore, through conducting the research in detail, the study shall seek to offer recommendations on how customer engagement can be improved, towards the achievement of sustainable development goals in the banking sector in Karnataka.

### 1.3 Research Objectives

1. To compare customer awareness levels of green banking initiatives among banks in Karnataka.
2. To assess the variance in awareness levels between customers of public and private sector banks.
3. To identify factors influencing customer awareness of green banking initiatives.
4. To evaluate customer perceptions of the benefits and drawbacks associated with green banking.

## 1. REVIEW OF LITERATURE

Green banking initiatives are strategies that aim to improve sustainability in the banking industry. For instance, digital banking, for instance, online transactions, mobile banking, and so on are advantageous in the sense that they do not require the use of paper and energy hence they conserve the environment (Jain, P., & Sharma, 2023). It is also important to note that green loans, which are employed to fund activities that are acceptable to the environment such as funding for renewable energy activities as well as funding of sustainable infrastructure projects are essential in sustainable banking (Jain & Soni, 2019). Similarly, some internal environmental policies like recycling, energy conservation programs, etc. are being implemented by the banks to reduce their environmental impact (Reddy & Chary, 2021).

Customers have a positive role to play in the application of green banking strategies. It has been found that awareness creation through campaigns, educative activities, and proper communication increases the level of customer awareness and understanding of sustainable banking practices (Sharma & Singh, 2018). As a result, there is a better customer awareness of green banking where private sector banks spend more time and money on

advertising compared to public sector banks. Nonetheless, there are still some potential problems that can hinder PSBs from implementing green banking strategies, such as bureaucratic problems and limited funding (Jain, P., & Sharma, B. K., 2023).

This is due to the reason that to gain more attention and support from the customers towards sustainability issues, it is highly necessary to know more about the attitudes and behaviors of the customers of green banking. Therefore, understanding the predictors of awareness levels will enable the formulation of effective strategies that banks can employ to increase awareness and adoption of green banking practices (Sharma & Singh, 2018). The third argument in favor of green banking implementation is the promotional policies introduced by the regulating bodies to promote the green banking concept among the banking institutions (Chandran et al., 2024).

Besides, green banking activities have economic returns for the banking institutions in the sense that they reduce their energy and operational expenses, thus making the banking industry more sustainable (Bahl et al., 2012). Indeed, green banking strategies can create employment and encourage economic growth by supporting investment in the green economy, structures, and systems (Liu et al., 2022). However, it was also identified that several constraining factors may hinder the adoption of green banking by customers; these include technological factors and security factors (Sharma & Singh, 2018).

The integration of green banking practices not only promotes the conservation of the environment but also increases the level of CSR for banking institutions. As pointed out in the literature review, there is the likelihood that banks that adopt green banking policies are likely to improve their image and loyalty to green customers according to Mittal and Dhingra (2007). The study also found that the adoption of green banking initiatives can provide a competitive advantage since it enables the differentiation of the banks in the competitive market and appeals to the new customer base who is concerned about sustainable development (Chaurasia, 2014).

It is also important to note that the question of financial inclusion can also be linked to green banking. Therefore, digital banking services can increase the access of the poor to banking services and reduce the number of branches in the credit organizations will enhance financial inclusion (Ojeaga & Owolabi, 2011). This is not only good for the environmental objectives but also for the social and economic objectives as it will lead to increased access to financial products.

Moreover, the tendencies of the global regulation of the financial sector have been evolving with the incorporation of the ideas of sustainability. The UNEP FI and other related bodies have urged banks to integrate the environmental aspect while addressing risk and business strategies (Rahman & Rahman, 2013). Implementation of these standards helps banks respond to environmental challenges and operate in compliance with standard requirements.

Therefore, the green banking initiatives are a positive step toward environmental conservation in the banking sector. In this way, the awareness and involvement of the customer can be increased, and a great contribution can be made to the protection of the environment and the promotion of sustainable solutions in the banks (Bhandary, n.d.).

## **2. METHODOLOGY**

### **3.1 Research Design**

During this study, a descriptive research approach is used to collect and analyze data using quantitative methods. Thus, a structured questionnaire is used as the primary instrument for the collection of data to provide a systematic approach to identifying the extent of customer awareness of green banking initiatives.

### **3.2 Sample Size**

The target population of the study is bank customers, and the sample consists of 500 customers from various public and private sector banks operating in Karnataka. To avoid a situation where the sample is skewed towards one age, income level, or geographical location, the participants are selected by using a stratified random sampling technique that considers age, income, and geographical location within the state.

### **3.3 Data Collection**

The data gathering is done by use of both online questionnaires and structured interviews. The questionnaire is segmented into various parts, such as personal background, green banking awareness, perceived advantages and obstacles, and information channels. The use of this approach facilitates a comprehensive analysis of the customer's perception and interaction with green banking.

### 3.4 Data Analysis:

The data collected is then analyzed using descriptive statistics, chi-square tests, and regression analysis. Mean and standard deviations were used to analyze the distribution of the responses about the different variables while cross-tabulation and chi-square tests were used to test the association between awareness level and demographic characteristics. Furthermore, by applying regression analysis, it is possible to define factors that have a substantial effect on customer awareness of green banking. These statistical tools help in identifying the relevant and significant findings and conclusions from the collected data set for recommending strategies to improve the level of customer engagement and awareness in the field of green banking.

## 3. FINDINGS

### 4.1 Demographics of Respondents

Demographic characteristics of the respondents, the study employed a diversified customer sample from different age brackets and education levels of the banks in Karnataka.

**Table 1: Demographic Characteristics of Study Participants**

| Demographic      | Percentage |
|------------------|------------|
| <b>Gender</b>    |            |
| Male             | 52%        |
| Female           | 48%        |
| <b>Age Group</b> |            |
| 18-24            | 20%        |
| 25-40            | 60%        |
| 41-60            | 18%        |
| Above 60         | 2%         |
| <b>Education</b> |            |
| Graduate         | 45%        |
| Postgraduate     | 35%        |
| Others           | 20%        |

### 4.2 Awareness Levels

The observation that the customers of public sector banks seem to be less informed about these services compared to the customers of the private sector banks means that there is a need to create awareness and encourage their uptake, especially by the public sector

**Table 2: Awareness Levels**

| Bank Type      | Awareness Level (%) |
|----------------|---------------------|
| Public Sector  | 54%                 |
| Private Sector | 70%                 |

### 4.3 Factors Influencing Awareness

**4.3.1 Education Level:** The literate respondents also had better knowledge about green banking programs in comparison to illiterate and less educated respondents. This shows that education plays a significant part in the understanding and reception of sustainable practices by consumers in the banking sector.

**Table 3: Education Level and Awareness of Green Banking**

| Education Level             | Number of Respondents | Aware of Green Banking (%) |
|-----------------------------|-----------------------|----------------------------|
| Graduate Degree             | 225                   | 80%                        |
| Postgraduate Degree         | 175                   | 85%                        |
| Secondary Education or Less | 75                    | 40%                        |
| No Formal Education         | 25                    | 20%                        |

**4.3.2 Access to Information:** Among the customers who regularly used Internet banking services, there was a higher level of awareness of green banking. Technology also makes the information more available and accessible thus making the informed and tech-savvy customers to be more aware.

**Table 4: Access to Information and Awareness of Green Banking**

| Internet Banking Usage | Number of Respondents | Aware of Green Banking (%) |
|------------------------|-----------------------|----------------------------|
| Frequent Users         | 300                   | 78%                        |
| Occasional Users       | 150                   | 55%                        |
| Non-users              | 50                    | 30%                        |

**4.3.3 Bank Communication:** The awareness levels suggested that the campaign and information dissemination from the banks were significant. It was also revealed that the banks that were more active in reaching out to their customers through different media had a higher degree of customer awareness.

**Table 5: Bank Communication and Awareness of Green Banking**

| Bank Communication Activity | Number of Respondents | Aware of Green Banking (%) |
|-----------------------------|-----------------------|----------------------------|
| Active Campaigns            | 200                   | 75%                        |
| Limited Outreach            | 200                   | 45%                        |
| Minimal Communication       | 100                   | 25%                        |

#### 4.4 Perceived Benefits and Challenges

##### 4.4.1 Benefits

- **Environmental Impact:** 75% of respondents agreed to the fact that green banking has environmental impacts which shows that green banking plays a crucial role in the promotion of environmental conservation.
- **Convenience:** Convenience was another factor that was highly considered by the respondents with 68% expressing their willingness and preference for easy and quick banking solutions.
- **Cost Savings:** On the green banking policy, 55% of the respondents supported the reduction of paper usage, branch visits, and possible cost savings in line with the financial incentives.

##### 4.4.2 Challenges

- **Lack of Information:** The lack of information on green banking was identified as a major concern by 40% of the respondents; therefore, banks must step up their communication strategy.
- **Technological Barriers:** Among the respondents, 30% reported that they experienced problems with digital banking services because of technological problems. These are some of the barriers that can be solved by advocating for digital literacy and designing interfaces that are easy to understand.
- **Trust Issues:** A quarter of the respondents stated that they are worried about the safety of the transactions made over the Internet. These concerns can be addressed by increasing investment in cybersecurity measures and engaging in clear and open communication.

The results enumerated in this study give a detailed picture of the level of awareness, attitude, and concern of customers towards green banking in Karnataka. The demographic differences that affect awareness of green banking practices, as well as the perceived benefits and challenges must be taken into consideration by the banks to ensure that customers engage in the practice. Managing the challenges and leveraging on the perceived benefits in the process can go a long way in making the banking sector in Karnataka more sustainable and financially inclusive.

## 4. DISCUSSIONS

**5.1 Comparative Analysis:** There is a significantly higher awareness level of green banking among the customers of private sector banks than the customers of public sector banks. This is because private banks have been more aggressive in their marketing and customers have been more educated on the benefits of investing in mutual funds. To address this, the public sector banks need to increase their communication with the customers and create awareness campaigns.

**5.2 Implications for Banks:** It is suggested that banks in Karnataka need to invest in advertisement and customer awareness programs so that the benefits of green banking like the conservation of the environment and saving

money can be effectively communicated to the customers. Ensuring that the users of online banking have easy access to the products and services and mobile applications can enhance the consumer's embrace of sustainable banking.

**5. 3 Policy Recommendations:** The regulatory authorities should encourage the adoption of green banking practices through the provision of tax credits, relaxation of rules and regulations as well as providing concessional credit facilities for green banking projects. For the green banking strategies to work, there is a need to involve the government, banks, and other non-governmental organizations. This is because the banks should be required to disclose information on the environmental and social impacts of their activities.

**5. 5 Integration of Findings:** Sustainable banking practices depend on education level, information access, perceived benefits, and challenges. Initiation of communication, customer engagement, and policy development are critical in driving sustainability in banking systems. The financial institutions of Karnataka can fund environment conservation and sustainable development.

## **5. CONCLUSION AND RECOMMENDATIONS**

### **6.1 Conclusion**

The study on the level of customers' awareness of green banking initiatives in Karnataka has provided valuable insight into the state of green banking in the region currently. Based on the analysis of the demographic profile of the customers, the awareness level, factors that affect awareness, perceived benefits, and challenges, and a comparative analysis of the public and private sector banks, the following conclusions can be made.

It is evident from the study that different levels of awareness regarding customers of the public and private sector banks show how communication plays a vital role in controlling the perceptions and knowledge of sustainability in the banking sector. While private sector banks have been more aggressive in terms of advertisement and creating customer awareness, the public sector banks have been less proactive. To address this gap, and to enhance the practices of green banking, public sector banks should open up the channels of communication and launch awareness creation campaigns that will ensure that the public is aware of the importance of adopting green banking practices.

Hence, the level of education, information availability, perceived benefits, and challenges also significantly affect customer awareness and engagement in green bank activities. This proves the fact that the frequency of using online banking platforms and having a higher education leads to higher awareness of sustainability, so it is crucial to work on improving the digital literacy of customers and conduct awareness campaigns. More importantly, the analysis of environmental concern, convenience, and cost as subjects of green banking reveals that customers can be driven by sustainability initiatives. However, there are challenges such as information gaps, restricted technology applications, and trust issues that have continued to contribute to the slow rate of adoption; this shows why there is a need to work on these challenges through the use of policies and other strategies.

### **6.2 Recommendations**

- **Enhanced Communication:** Online advertisement should be employed by public banks to enhance green banking.
- **Digital Infrastructure:** Improve the mobile banking interfaces and online tools to provide more and easier access to green banking information.
- **Policy Support:** The government should encourage green banking by offering tax holidays and policies that are less rigid for the banking sector.
- **Collaborative Partnerships:** Therefore, the government, NGOs, and banks should work together to support sustainable banking.

In conclusion, it can be stated that the banks, implementing these recommendations and utilizing the findings of the study, will be able to provide a great contribution to the promotion of sustainable development and environmental conservation in Karnataka. In this paper, the following are some of the measures that have been discussed on how banks can improve sustainability to achieve green banking in the region: Communication, Technology, Policy, and Partnership with Green Stakeholders.

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