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A STUDY ON THE IMPACT OF GREEN BANKING PRACTICES ON CUSTOMER SATISFACTION AMONG INDIAN COMMERCIAL BANKS

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ABSTRACT

The banking sector plays a crucial role in fostering a sustainable ecosystem and driving economic development. Achieving sustainable development requires the implementation of an efficient regulatory framework and the use of appropriate economic instruments. Legal action, stringent environmental regulations, or consumer boycotts can all jeopardise a company's existence. It is crucial for companies to consistently operate within a framework that ensures sustainable development. This study highlights the importance and prominence of green banking, thus contributing to the sustainable banking and development of India. There has been a noticeable gap in the study of customers' perceptions regarding green technology in Indian banks.

This article offers a detailed analysis of a thorough study that explores the important effects of green banking practices on consumer satisfaction in the commercial banking sector of India. In recent years, there has been a global shift towards environmentally conscious and sustainable business practices, which has also impacted the banking industry. The study utilises a comprehensive methodology that combines qualitative and quantitative analyses to assess the effect of green banking initiatives on customer satisfaction in the Indian banking sector. Through the use of surveys, interviews, and data analysis, this study aims to uncover the key factors that influence the successes or challenges faced by financial institutions when adopting environmentally sustainable practices. In addition, it aims to understand how these factors impact the overall satisfaction of their customers. The findings of this study are anticipated to greatly enhance our understanding of how customer-centric strategies and environmental responsibility intersect in the banking industry, particularly in the unique socioeconomic context of India. By thoroughly examining the effects of environmentally conscious banking practices on customer satisfaction and exploring ways to create a sustainable and customer-centric banking environment in India, this study seeks to offer valuable insights to professionals and scholars.

Keywords: Customer satisfaction, Environmental performance, Sustainable growth

INTRODUCTION

In the dynamic world of modern banking, the integration of environmental sustainability has become a crucial element, generating increasing attention in the form of green banking practices. This article conducts a focused investigation to unravel the intricate relationship between customer satisfaction and green banking practices within the Indian commercial banking sector. Exploring

the connection between sustainable growth in the banking sector and environmental performance is a topic that is gaining attention in the research community. The aim of this study is to gain a deeper understanding of the specific impacts of these practices on the levels of satisfaction among banking customers (Wang, 2019). Given the financial sector's commitment to aligning with international sustainability goals, it is crucial to understand how these eco-friendly efforts impact consumer satisfaction. This study aims to make significant contributions to the understanding of promoting sustainable development and improving customer satisfaction by examining the environmental efforts of commercial banks in India. By doing so, it aims to illuminate the evolving dynamics at the crossroads of ethical banking practices and stakeholder contentment (Yuan 2018).

Green Banks carefully evaluate ecological and social factors to ensure the preservation of natural resources and the protection of the environment. (IBA, 2014). Green Banking has implemented various initiatives, including the introduction of green credit cards, green home loans, mobile banking, telephone banking, and internet banking.

There has been a significant difference between green finance and banking, and so far, only a few people have had a thorough grasp of both. Green banking, as defined by experts, involves adopting banking practices that are mindful of the environment and contribute to reducing carbon footprints (Tara et al., 2015). "Green finance encompasses the financing of environmentally-friendly projects, programmes, and financial systems," was the title of a concept introduced by Dr. Nannette Lindenberg of the German Development Institute in April 2015. This concept explores various aspects of climate change mitigation, such as areas for green investing, adapting to climate change, sustainable electricity, and energy efficiency. Financial institutions that prioritise green investments have established partnerships with green climate funds, which include structured green funds and green bonds (Zhang, 2022).

Lately, financial institutions have been embracing environmentally sustainable practices, such as green banking, to contribute to global environmental protection. They do this by integrating ecological considerations into their investment and lending strategies (Saeed, 2022). Understanding the adoption and utilisation of green technology in information systems research is crucial for comprehending its role in green banking. Various theoretical frameworks, primarily based on social and psychological theories, are used to explain the adoption and use of technology. Conservational concerns have not been a priority for banks and financial institutions until recently. In the past, banking institutions have often viewed consumer complaints as an inconvenience or disturbance to customers' business operations. Environmental management, however, is currently seen as a burden by the organisation. Although banks are not directly affected by environmental degradation, they do face certain indirect costs (Liu 2022). Due to the nation's strict environmental regulations, the sector must follow specific business protocols. If a default were to occur, it could potentially result in the sector shutting down, leading to a possible bank failure. Collaboration between stakeholders and financial institutions is crucial in assessing the social and environmental impacts of clients' investments. According to Momani et al. (2018), these consequences will

prompt consumers to address concerns related to environmental and social policies linked to investments.

The internal environmental impacts of banking are relatively insignificant and clean. Consumer behaviour plays a crucial role in determining the ecological impact of banks. Consequently, assessing the environmental consequences of the bank's external operations poses a significant obstacle. It is important to highlight that when banks implement effective environmental management practices, it can lead to increased company value and reduced loss ratios. This is because higher-quality loans generate higher incomes. Banking should prioritise environmental sustainability and responsible lending practices. Banks should prioritise support for green industries (Haque, 2018). Exploring sustainable economic development and the need for finance reform. The idea of "green banking" has the potential to bring about positive impacts on economies, industries, and institutions. Green Banking promotes future improvements in the quality of banks' assets and ensures environmental sustainability. The study conducted by Tara et al. (2015).

OBJECTIVES

- To understand the role of green banking in influencing effective customer satisfaction
- To analyze the impact of green banking on increasing environmental performance
- To apprehend the effect of green banking in augmenting the sustainable development of commercial banks

Need and Scope of the study

The need and scope of the study are multifaceted and significant within the contemporary banking landscape. Firstly, with the global community increasingly acknowledging the urgency of addressing environmental concerns, the banking sector, as a pivotal player in the economy, faces mounting pressure to adopt sustainable practices (Durrani, 2020). Green banking, which encompasses a range of environmentally responsible initiatives aimed at reducing carbon footprints, promoting renewable energy financing, and fostering sustainable development, has emerged as a critical strategy for financial institutions worldwide. Within the context of Indian commercial banks, the need to explore the impact of green banking practices on customer satisfaction is particularly pertinent due to India's rapid economic growth, coupled with its environmental challenges stemming from population density, industrialization, and resource depletion (Debrah, 2022).

The study's scope extends beyond mere theoretical exploration to empirical investigation, seeking to provide tangible insights into the efficacy of green banking initiatives in enhancing customer satisfaction within the Indian banking sector (Barua, 2022). By delving into this topic, the research aims to bridge the gap in existing literature, which often lacks comprehensive empirical analyses specific to the Indian banking context (Akomea-Frimpong 2021). Understanding the relationship between green banking practices and customer satisfaction is essential not only for banks seeking

to align with sustainability imperatives but also for policymakers and regulatory bodies striving to promote environmentally responsible practices within the financial sector.

Moreover, the study's scope encompasses a multidimensional approach, examining various dimensions of green banking practices, such as eco-friendly product offerings, green financing options, carbon footprint reduction strategies, and stakeholder engagement initiatives (Amidjaya, 2020). By adopting a holistic perspective, the research endeavors to capture the diverse facets of green banking and their potential influence on customer satisfaction metrics, including loyalty, trust, perceived value, and overall banking experience (Ziolo, 2019).

Furthermore, the geographical focus on Indian commercial banks provides valuable insights into the unique challenges and opportunities faced by financial institutions operating within the Indian market. Factors such as cultural preferences, regulatory frameworks, technological infrastructure, and socio-economic dynamics shape the implementation and impact of green banking practices, necessitating a nuanced understanding specific to the Indian context.

In summary, the study on the impact of green banking practices on customer satisfaction among Indian commercial banks addresses a pressing need within the banking industry and academia to explore the nexus between sustainability initiatives and customer-centric outcomes. By elucidating this relationship and uncovering actionable insights, the research contributes to the advancement of knowledge in both green banking and customer satisfaction domains, thereby facilitating informed decision-making among banks, policymakers, and stakeholders committed to fostering sustainable development and enhancing customer welfare.

METHODOLOGY

A comprehensive research approach is used in this study to conduct a more in-depth investigation of the difficulties that were outlined before. Additionally, the researchers relied on secondary sources of information in their inquiry. To locate pertinent information that was associated with the study, the researchers conducted an exhaustive search of web databases such as Google Scholar, Scopus, and EBSCO.

The search procedure takes into consideration two different groups of terms. In the beginning, it makes an effort to gather up all of the possible ways to refer to something as "sustainable." This topic has been investigated by several academic disciplines and at several different periods and under a variety of labels. Some of the terms that have been used include ethical banking, social responsibility, corporate social responsibility (CSR), and others. Additionally, the study has to include a variety of publications that include discussions on the responsibilities that banks have about the environment. There have been those who have discussed socially responsible banking (Zheng 2021). Last but not least, terms such as "environmental, social, and governance" (ESG) and "sustainable development goals" (SDG) have become more common in this sector. It is for this reason that every one of these terms is included in the first portion of the inquiry. Several terms

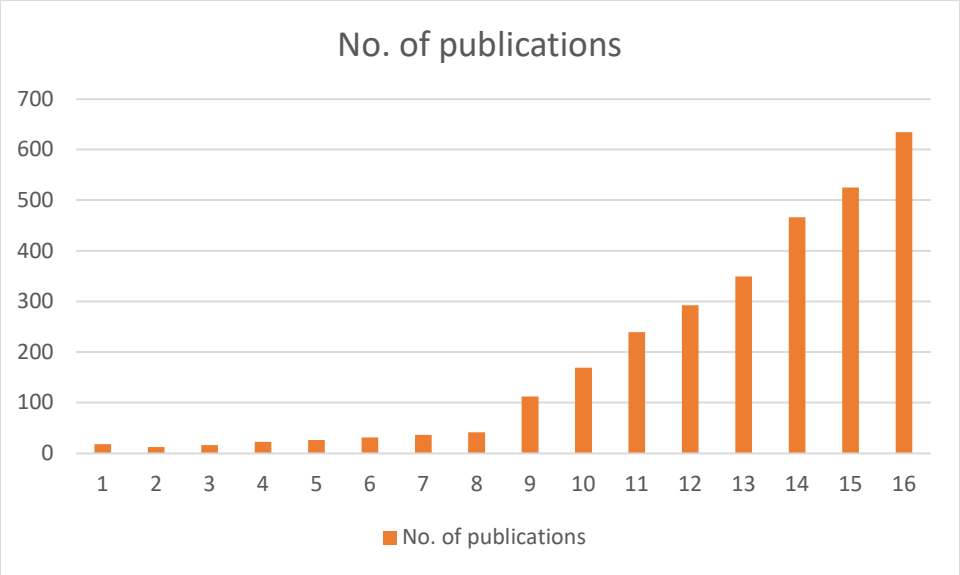
that are associated with the banking sector of the financial business are used in the second part at various points (Weber 2019).

The initial phase in the procedure consisted of looking for research articles that were pertinent to the study that was being conducted at the moment. During this step, it was necessary to use an appropriate search engine to locate each and every journal article on green banking that was published in the banking industry. Scopus was chosen for this research for three reasons: (1) it has a high rating of accuracy for locating journal articles; (2) it covers a larger range of publications in areas that are relevant to the study, such as risk management, accounting, and finance; and (3) it is frequently used as a search engine for modern review studies. Scopus was chosen because of these three reasons.

"Finance for nature" 'Green banking,' 'customer satisfaction,' and 'SHG' were the terms that were used in this study. The term "bank" was one of the banking industry-related keywords that was used in the search for publications that provided relevant information. When conducting their search through the publications, the authors of this study also took into consideration the perspectives of Bangladeshis. During the first search, 280 items were discovered in various publications such as books, journals, conference proceedings, and reviews. Within the context of this particular case, the authors have placed additional limits, which include the following: (a) the publication year is between 2018 and 2023; (b) the kind of search is journals; (c) the type of document is articles; and (d) the language selected is English. Please find below a list of the first search codes for the article. During the first phase, a total of 42 publications about green finance were made available. However, none of these papers were selected since they did not address all of the relevant components of green finance in the banking business. This was the reason why none of them were selected. Following an exhaustive search and reading of the relevant literature, a total of 36 articles were eventually selected for the present study. This decision was made in accordance with the objectives of the research.

Table 1: Keywords used for the study

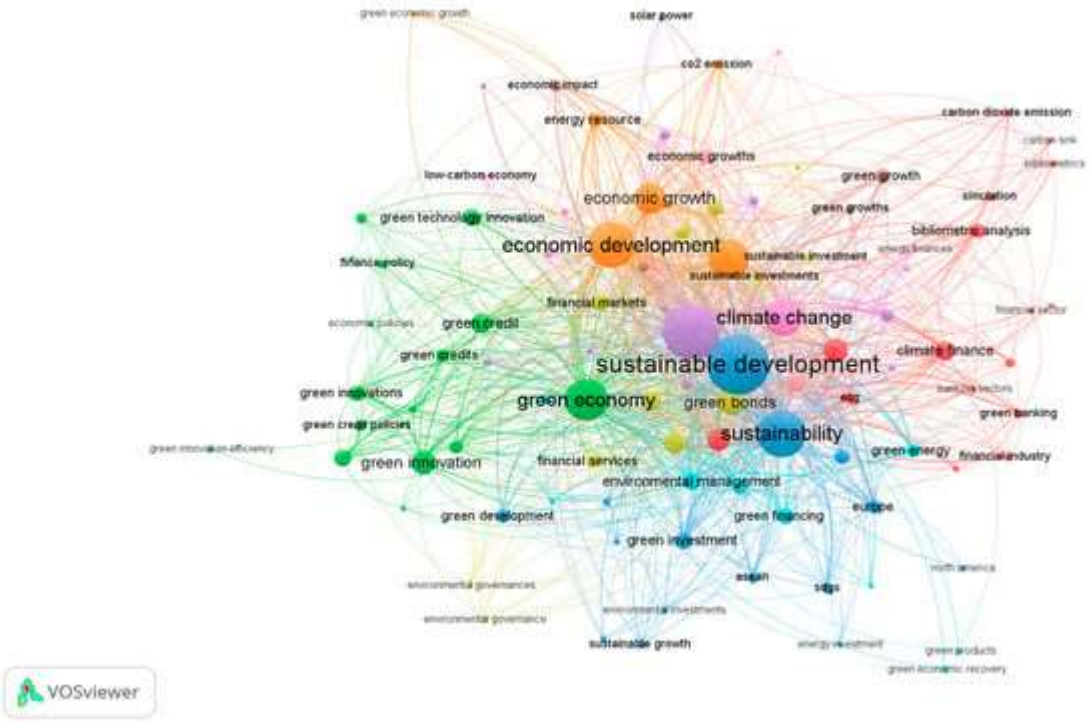
Document	Keywords used
Review article Scopus database	sustainable
	Green banking
	Customer satisfaction
	SHG
	Commercial banking
	Ethical banking



The data of all studies employed in the current research were entered into a Microsoft Excel spreadsheet for further graphical analysis. To do so, authors' names, titles of the articles, keywords, and abstracts were excluded. Additionally, VOS-viewer software was utilized to process the data.

Innovations in financial technology have revolutionised India's banking and finance industry. Public sector banks performed around average on several metrics, including Internet banking services, customer satisfaction with ATM services, and more, when compared to private sector banks in this area around 2015. Cutting down on carbon emissions is a top priority for environmental protection, and every country must do its part to achieve this goal. Numerous changes are taking place across the board in the Indian economy as a result of climate change. These changes will have an effect on the whole economy, not just the financial sector. Thus, "green finance" is a trendy word these days. What this term alludes to are the institutional safeguards put in place to keep the environment safe. All countries must work together to protect the ecology and climate. Following the lead of Fintech innovations, the banking sector is working to reduce carbon emissions by minimising the impact of its operations on the environment. Recent years have seen a rise in the number of banking institutions that have taken steps to promote sustainable banking

and reduce environmental degradation via the allocation of their financing, capital, and lending resources (UNEP FI, 2007; 2014). There are a lot of important reasons why banks want to link green and renewable financing, such as licensor responsibilities, borrower financial capabilities, environmental risks, and commercial potential.



REVIEW OF LITERATURE

The researcher will collate the past reviews from published journals related to green banking practices on customer satisfaction among Indian commercial banks, the researchers will source the secondary data from well-reputed Scopus indexed journals

Green banking and environmental sustainability

In recent years, there has been an increase in the amount of attention paid to the significance of environmental sustainability and green banking. This has led to an increase in the emphasis that is placed on both academic research and implementations in the real world (Sarma, 2021). The world is being confronted with an environmental crisis that has never been seen before, with the urgency surrounding issues such as the loss of biodiversity, the depletion of resources, and climate change rapidly increasing. Green banking is a subset of sustainable banking that focuses on financial strategies and investments that, in addition to providing financial rewards, have a beneficial influence on the environment. Green banking falls under the umbrella of sustainable banking (Sharma, 2022).

The vast bulk of the research that is presently accessible focuses on the subjects of environmental sustainability and green finance in Asian countries, with a special emphasis on China. An enormous amount of study has been conducted on the topic of the role that green funding plays in low-carbon development in relation to carbon emissions. The implementation of green financing and the growth of renewable energy sources have been two of the most important factors that have contributed to China's clean energy revolution. An investigation has also been conducted to determine whether or not environmental rules and green banking are successful in fostering sustainable finance (Sadiq, 2022).

Green banking and investments

Banking and investments that are ecologically responsible and sustainable have seen tremendous development as a consequence of a global shift towards environmentally aware and sustainable economic practices.

There is a great amount of study being done in China, specifically regarding the quality and effectiveness of green bonds. There is a fundamental need for green financial markets to ensure the quality of green bonds since these bonds are used to support activities that are beneficial to the environment (Nawaz, 2021). Research has been conducted to investigate the quality processes and benchmarks of green bonds in an attempt to provide assistance to green bonds in attaining their sustainability goals. In addition, the difference between green and non-green investments is a topic that is often investigated in academic circles. Researchers looked at how these two assets affected hedging and diversification strategies and found that they had a significant impact. The purpose of this research is to explore the influence that green and non-green investments have on portfolio strategies, risk management, and the overall environment of the financial sector. There is still another fascinating association between the availability of natural resources, the eco-efficiency of the area, and the amount of direct investment from other countries. In light of international agreements such as COP26, scholars are examining the ways in which foreign direct investment (FDI) and regional ecological effectiveness interact with one another (Macpherson 2021). This is being done as states attempt to balance sustainable development with economic progress.

The method in which financial organisations include green investment and financing teams is an essential component of the research that is being conducted on green banking institutions. To encourage environmentally responsible investment, the green banking agenda requires that stakeholders be aware of the structure and behaviour of financial institutions. The development of environmentally friendly financial instruments and their effects is an additional topic of study. Researchers have done an analysis to determine whether or not green banking products, such as green bonds and minibonds, are effective in meeting environmental and sustainability goals (Khatun 2021). This field contributes to the design of plans and policies that maximise the efficiency of industrial structures and encourage the development of sustainable practices.

Research on green banking studies the influence that it has on the architecture of industrial organisations. Research has been conducted to investigate the ways in which green banking activities, such as investments and loans, might alter and optimise industrial sectors in the direction of sustainability. These results should be given priority by governments and corporate stakeholders who are looking for financial incentives to encourage environmentally friendly operations at their companies (Hossain 2018). For the purpose of achieving sustainable financial growth, it is also necessary to assess the interactions that occur between the financial factors and the green banking market. Scholars research the association between green financial indices and other financial indicators in order to get a more thorough grasp of the influence that green banking has had on the landscape of the financial industry.

There are a great number of undiscovered territories in the realm of green investments and finance, which presents prospects for more research. The behavioural aspects of green investment centre on the psychological factors and prejudices that shape investment decisions; subnational and local initiatives, which are often disregarded despite their significant contribution to ecological action; cross-country comparisons that offer a more comprehensive perspective on successful green banking practices; the function and consequences of green banking in developing economies; and novel green financial instruments such as blockchain (Gusenbauer, 2020). In addition to providing legislators, investors, and financial institutions with enlightening data that can contribute to the promotion of a more environmentally conscious and sustainable future, an investigation into these obscure aspects had the potential to improve our understanding of sustainability within the financial industry.

Limitations of the study

Systematic literature reviews provide useful insights by consolidating current study findings, although they are not without limits. When conducting a comprehensive literature study on the influence of green banking practices on customer satisfaction in Indian commercial banks, certain constraints may be encountered:

Publication Bias: Systematic literature reviews depend on published research, which might be influenced by publication bias. Publication bias may lead to an overestimation of the impact of green banking practices on customer satisfaction since positive results are more likely to be published compared to research with null or negative findings.

Studies exhibit heterogeneity in methodology, sample characteristics, and outcome measures, posing challenges in comparing and synthesising their results. The diversity in research designs and situations may restrict the applicability of the review's findings.

Variability in the quality of the studies included in the review may impact the reliability and validity of the synthesised evidence. Some studies may have methodological weaknesses, such as limited sample numbers, insufficient control for confounding factors, or biassed measuring tools, which may weaken the reliability of their results.

Language and Geographic Bias: The review might be constrained by language and geographic biases if it just considers articles published in English or focuses solely on research carried out in certain areas of India. Excluding non-English publications or research from certain geographic regions may lead to an inadequate representation of the existing evidence.

Temporal Bias: The review might be influenced by temporal bias if it just incorporates research published during a certain timeframe. Due to the dynamic nature of green banking practices and customer satisfaction research, neglecting earlier studies or overlooking current advancements may result in an obsolete or inadequate comprehension of the subject.

Systematic literature reviews depend on secondary data analysis, which may restrict the level of comprehension as compared to primary research due to inherent limitations. The review's scope could be limited by the availability and reliability of data from the research included, which might impede the investigation of intricate correlations or causation.

Scope Limitations: The review's scope might be either too restricted or too wide, affecting its relevance and application. Concentrating just on green banking practices and customer satisfaction in Indian commercial banks can neglect significant international comparisons or miss capturing wider trends in the banking industry's sustainability initiatives.

To overcome these constraints, it is essential to carefully choose studies, conduct thorough quality assessments, ensure transparent reporting, and do sensitivity analysis to evaluate the strength of the results. Although challenging, a well-executed systematic literature review may provide useful insights and establish a basis for future research in the area of green banking and consumer satisfaction.

DISCUSSION

According to Sarma and Roy (2021), the majority of Asian nations have taken the initiative to research environmentally responsible finance. To promote environmentally responsible banking practices, the banking industry in India has collaborated with a variety of global strategic relationships and joined international groups. When it comes to constructing its internal framework for sustainable banking, the central bank has been among the most helpful SBN member nation regulators. This is because the central bank is a partner in the Sustainable Banking Network (SBN). India has continued to take part in the investigation that is being conducted by the United Nations Environment Programme (UNEP) ever since it was first introduced in 2014 (Khairunnessa et al., 2021). A small number of other banks and financial institutions are collaborating with other international organisations in order to further the cause of long-term finance.

However, the fact that India was found to have some international green banking was important, even if it was not a big amount. Between the years 2014 and 2019, the banking sector as well as non-bank financial organisations made investments in environmentally friendly projects. According to Zheng et al. (2021a), the Indian banking industry has been successful in fostering

green project finance via the implementation of green banking principles, donor-aided industrial development projects, on-lending systems, credit quotas for banking institutions, and tax-advantaged refinancing processes. Green banking techniques have been shown to have a significant impact on green banking, as stated by Chen et al. (2022). Despite this, banks and other financial institutions have been strengthening their capacity to handle environmentally friendly projects as a result of the introduction of green banking policy guidelines (Haque and Murtaz, 2018).

The investigation brought to light the key obstacles that are preventing the green banking sector in India from making progress. According to the data, the high transaction costs that are connected with green projects seem to be the most significant barrier to the expansion of green banking in India. According to Hossain (2018), green initiatives take a different approach than conventional projects and generate challenges that are distinct from the project itself. As a result of the reluctance of banks to provide loans to locally owned and operated enterprises until they have shown their creditworthiness for environmentally conscious endeavours, a great number of businesses have difficulty obtaining financing. When it comes to obtaining loans, small businesses often approach banks and other financial institutions; yet, the necessary documentation is sometimes lacking. In addition, it is fairly uncommon for directors or owners who have weak credit scores to submit unsolicited applications that include false information. According to Zheng et al. (2021), to successfully build green banking in any nation, it is necessary to adequately handle each of these difficulties.

The results of the study offer some positive implications for financial institutions, bankers, government officials, customers, investors, and academics in India. These implications pertain to the establishment of green banking as a means of achieving the Sustainable Development Goals (SDGs) of the country. Comparatively speaking, private commercial banks in India provide a significant contribution to direct green banking as compared to other banks and non-bank financial entities. As a result, the results of this study might serve as a source of motivation for private commercial banks to increase their green investment in a variety of initiatives that are helpful to the environment. On the other hand, it is necessary to encourage state-owned commercial banks and specialty banks to provide green financing products such as green bonds and other green investments. Ironically, the results might contribute to a better understanding of the fundamentals of green banking and the sources of green money in India, which would be beneficial for the implementation of green finance in the nation. In conclusion, the study conducted by the research may be of use to managers and regulators in the process of establishing rules that take into account the needs of stakeholders, therefore giving the banking sector an advantage over its competitors.

CONCLUSIONS

The purpose of this research was to conduct an analysis of the existing body of literature on green banking and to identify key components that have a major influence on the green banking practices of commercial banks in India. The most recent meta-analysis demonstrates that environmental

conservation, climate change mitigation, social inclusion, and sustainability have garnered attention and concern on a global scale. This is a trend that has also been seen in the banking industry over the last several years. An in-depth analysis of 53 of the most important papers on green banking was the methodology that was used for this research. The findings of the research indicate that there are twenty-one factors that have an effect on green banking in India. In the context of the banking industry in India, several studies have been conducted, and among the variables that have been utilised in these studies are environmental performance, green economic growth, energy efficiency, green banking policy, sustainable development, environmental protection, green investment, green bonds, and environmental risks. Furthermore, the present research reveals that a significant number of the features of green finance are applied in other nations, such as China, Malaysia, India, and so on at this point in time. This research also includes a breakdown of the number of research papers published over each year, which serves to illustrate the increasing trend of research publications among academics who are exploring green banking. Furthermore, the results of the study make it abundantly clear that developing nations are responsible for a sizeable portion of the research contributions in the field of green banking contributions. The contributions that India is making to green banking are particularly significant when compared to those made by other South Asian nations.

The findings of this research have significant implications for a variety of stakeholders, including academics, practitioners, lawmakers, and service providers, especially those working in the banking and financial industries. To begin, this is the very first research that examines the history of green banking from the perspective of nations and regions that are economically disadvantaged. To provide a more precise definition, there have been no review studies initiated in the Indian banking industry in the past. An indication of how extraordinary the present research is is provided by this. Several important components of green banking that have a significant impact on the implementation of sustainable financing are outlined in this paper, which represents the second point. Furthermore, the elements of green banking that have been identified might make it possible for researchers to conduct out experiments that are more comprehensive. Last but not least, and thirdly, the findings of this research will assist decision-makers in developing green banking policies that are both current and feasible, which will assist nations in achieving the Sustainable Development Goals (SDGs).

This research has several shortcomings, even though it provides significant information on green banking. It is important to note that our research did not take into consideration any preprints, abstracts, reviews, or conference papers. Because none of this research have been published in journals that are subject to peer review, this is the reason why this is the case. One of the factors that contribute to the existence of sampling bias is the fact that this review research only includes works that have been published in the English language. Thirdly, while the concept of green banking has been investigated for a century, the research that we have conducted only takes into account studies that were published between the years 2014 and 2023. This might also be biassed in some way. In the fourth place, the research used a wide range of techniques for conducting

thorough evaluations and analysis. These tools included Leximancer, Covidence, Zotero, and others. In conclusion, given that this study is a meta-analysis of previous research on green banking, with a particular emphasis on the banking sectors of India, it is possible that specialised empirical research on a few separate factors might be conducted to provide a more comprehensive understanding of the environment in other business sectors in other countries.

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