# "A SUSTAINABLE APPROACH TOWARDS GREEN FINANCING ON BANKING SECTOR IN ERNAKULAM DISTRICT"

Dissertation submitted to

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In partial fulfillment of there requirement for the degree of

## **BACHELOR OF COMMERCE**

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## **B.Com COMPUTER APPLICATIONS**



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(Affiliated to Mahatma Gandhi University

Accredited to NAAC with "A+" Grade)

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### **BONAFIDE CERTIFICATE**

This is to certify that this dissertation entitled "A SUSTAINABLE APPROACH TOWARDS GREEN FINANCING ON BANKING SECTOR IN ERNAKULAM DISTRICT" has been prepared by Sharon Jolly, Sandesh S, and Muhammed Arshad V K under my supervision and guidance in partial fulfillment of the requirement for the Degree of Bachelor of Commerce of Mahatma Gandhi University. This is also to certify that this report has not been submitted to any other institute or university for the award of any degree.

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## **DECLARATION**

We, **SHARON JOLLY, SANDESH S & MUHAMMED ARSHAD V K**, B. Com Final year students, Department of commerce (Computer Application), Bharata Mata College, Thrikkakara, hereby declare that the Dissertation submitted for the award of Bachelor's Degree is our original work. We further declare that the said work has not previously been submitted to any other University or Academic Body.

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# **CHAPTER 1 : INTRODUCTION**

#### 1.1 INTRODUCTION

The goal of green financing is to direct more money towards sustainable development priorities from the public and private sectors' banking, microcredit, insurance, and investment sectors. In the financial industry, banks in general help projects and businesses a lot by offering a range of funding options. As a result, they significantly affect their clients' operations that have caused or have the potential to cause negative environmental effects. Thus, banks place a high value on addressing environmental concerns. In the banking industry, "green financing" refers to financial services and goods that are intended to promote initiatives and projects that are environmentally friendly. These programmes seek to reduce global warming, protect natural resources, and encourage environmentally beneficial behaviour. Green funding has become more well-known in recent years as a result of escalating environmental concerns. In order to finance initiatives like renewable energy, energy-efficient buildings, and conservation activities, banks play a crucial role by providing green loans, green bonds, and other financial instruments. This pattern illustrates a global movement towards banking practices that are more ethical and sustainable, balancing monetary goals with environmental goals.

The banking sector's adoption of green financing heralds a sea change in how financial institutions view environmental sustainability. This novel method of banking has become more well-known as the world struggles with urgent ecological problems. Green financing is allocating money to initiatives that respect the environment, promoting a peaceful coexistence of finance and the environment. We will examine the relevance, workings, and effects of green banking in this conversation, as well as how it helps to create an environmentally friendly future.

Environmental impacts from diverse industries' production and consumption have been significant since the development of human society. In order to assist businesses and projects, banks exert a significant amount of influence. Considerable impact on the operations and moreover on the Environment On the other hand, in the event of significant environmental incidents, it is Typically, it is the persons directly at fault not the financial institutions that are Exposed to legal risk, The banking sector affects the environment both directly and indirectly. Direct effects include the amount of energy used for lights, heating, computers,

and ATMs during bank operations. equipment, paper and water use, trash management, and business travel. External environmental effects, often known as indirect effects, describe the impact brought on by the use of financial services by bank customers. This includes a broad range of activities include the sale of financial products, deposits, and lending activities. These endeavors are crucial to the global economy. but can have negative environmental effects. In comparison to direct indirect environmental effects appear to be more significant and consequently merit additional thought.

To avoid financial losses and maintain their reputation, it is essential to address social and environmental challenges. Banks are unwilling to have funded projects halted in their midcourse by external social pressure or direct protection from neighborhood NGOs and communities with distressed properties due to pollution. Given the connection between banking and the environment, it is crucial to include environmental concepts into banking practices. It can prevent banks from suffering losses due to environmental hazards, and Promote environmental conservation at the same time. Otherwise put, Greening the financial sector is a desirable step toward Sustainable growth.

#### **1.2 NEED AND SIGNIFICANCE OF THE STUDY**

Banks, consumers, and environmental safety all benefit from green financing. Green finance offers economic and environmental benefits to all. It promotes more equitable social growth by levelling the playing field in the shift to a low-carbon society and expanding access to green goods and services for businesses and individuals alike. In order to achieve sustainable development goals, we must create a new file for green projects and increase the financing of investments that benefit the environment through new financial instruments and new policies, like green bonds, green banks, carbon market instruments, fiscal policy, and green central banks. Green banks support the expansion of low carbon technology by soliciting funding from governmental agencies and ecologically conscious businesses.

#### **1.3 STATEMENT OF PROBLEM**

The problem facing green banks is diversification, which hinders their ability to conduct business with organisations that pass the screening process used by green banks. Green banks will have a smaller base of support because they have fewer consumers. Although there have been notable advances in public awareness and financing options, there are still significant obstacles to overcome, such as high borrowing costs, exaggerated claims of environmental compliance, an abundance of green loan definitions, and maturity gaps between long-term green investments and investors' comparatively short-term interests. Concern over climate change and environmental sustainability has increased recently on a global scale. Finance for a variety of economic activities, including those with a considerable environmental impact, is provided in large part by the banking industry. The degree to which banks are successfully integrating and implementing green financing projects within their operations is a significant challenge, despite rising awareness and regulatory pressure to encourage green financing practices.

### 1.4 OBJECTIVES

- To have a deeper understanding of green financing.
- To generate awareness on green financing to the customers.
- To find out the various green financing facilities given by the selected bank to the customers.
- To determine whether the customers are satisfied with green financing.

### **1.5 <u>SCOPE OF THE STUDY</u>**

This study's scope includes a thorough investigation of green financing with the goal of fostering a better understanding of all of its varied aspects. We will examine the numerous environmental problems that the world is currently facing and determine how green financing, as a financial tool, can be crucial in resolving these problems. Additionally, this research aims to offer financial institutions with creative and useful solutions they may use to

advance their green finance projects. Through this study, we hope to increase public awareness of the value of green financing among financial institutions and their clients, ultimately promoting a more environmentally friendly and sustainable global economy.

### 1.6 <u>RESEARCH METHODOLOGY OF THE STUDY</u>

#### PRIMARY DATA

A primary data is the data which is collected by the researcher from the main source, It the data are collected through surveys from different customers.

#### STATISTICAL TOOLS USED

- Graphs
- Tables
- Percentage analysis

#### HARMONIC MEAN

A statistical metric called the harmonic mean is used to average a set of data and highlight the significance of smaller numbers. The reciprocal of the arithmetic mean of the reciprocals of individual values is how it is defined

### 1.7 LIMITATIONS OF THE STUDY

- Economic, regulatory, or political changes can significantly impact green financing practices, and these external factors may not be fully accounted for in the study.
- The study may focus on a specific region or country, limiting its applicability to a global context.
- Constraints related to time, budget, and available resources can impact the depth and breadth of the study.

## 1.8 CHAPTERISATION

#### **CHAPTER 1 : INTRODUCTION**

- 1.1 Introduction
- 1.2 Need and Significance of the study
- 1.3 Statement of problem
- 1.4 Objectives
- 1.5 Scope of the study
- 1.6 Research Methodology of the study
- 1.7 Limitations of the study

### **CHAPTER 2 : LITERATURE REVIEW**

#### **CHAPTER 3 : THEORETICAL FRAMEWORK**

#### **CHAPTER 4 : ANALYSIS AND INTERPRETATION**

#### **CHAPTER 5 : FINDINGS SUGGESTIONS AND CONCLUSION**

- 5.1 Findings
- 5.2 Suggestion
- 5.3 Conclusion

# **CHAPTER 2: LITERATURE REVIEW**

#### 2.1 LITERATURE REVIEW

Cai & Guo (2021) Conducted a study on Finance for the environment: A scientometrics analysis of green finance.Organisations are shifting their focus to greening the business process in order to protect environmental sustainability. Financial management, like any other business function, has shifted to environmentally friendly practises. Green finance is a new financial model.combines environmental conservation and economic benefit. This research examines the intellectual structure and networking of green finance publications. The Scopus database was used to extract bibliometric data on green finance studies. Through an examination of published works, this study identifies the most productive countries, universities, authors, journals, and most prolific publications in green finance. The study also maps bibliographic coupling (BC) and co-citation to visualise the intellectual network.

Taghizadeh, Yoshino & Phoumin (2021) conducted a study on Analyzing the characteristics of green bond markets to facilitate green finance in the post-COVID-19 world. COVID-19 epidemic and global recessions have curtailed global investments in green projects, putting the attainment of climate-related targets at risk. As a result, the world after COVID-19 must develop a green financial system by introducing new financial instruments. Green bonds, a sort of financing instrument used to fund sustainable infrastructure projects, are becoming increasingly popular in this area. While the literature does not dispute their effectiveness in combating climate change, research emphasises the severe risks and limited returns associated with this device. This study examines green bond markets in several areas, with a focus on Asia and the Pacific.

Zheng et al (2021) conducted a study on Factors affecting the sustainability performance of financial institutions in Bangladesh: the role of green finance. Few studies have examined the effects of green finance dimensions on bank sustainability, despite the growing popularity of sustainable investment and green finance within the context of the Sustainable Development Goals (SDGs). The goal of this study is to ascertain what attributes make up green finance and how they affect the sustainability performance of financial institutions in developing nations like Bangladesh. The extent to which green financing has been adopted by the nation's banks and non-bank financial organisations between 2015 and 2020 is also

demonstrated in the report. The structural equation modelling technique was employed in this work to accomplish the research goals because of the nature of the dataset.

Pimonenko et al (2021) conducted a study on Green financing for carbon-free growth: Role of banks marketing strategy. Concerns about climate change are currently top of mind internationally, and banks' and green finance's contributions to reaching a future free of greenhouse gas emissions are being highlighted more and more. This study looks into the scientific underpinnings of bank marketing in an effort to evaluate the contribution of green finance to the growth of a carbon-free economy and to suggest future directions for future research. The methodical arrangement of scholarly articles within the Scopus database has demonstrated a growing pattern of publication activity concerning bank marketing and the growth of the carbon-free economy. The scientific problem, on the other hand, is a lack of data regarding how financial marketing strategies used by banks contribute to faster economic growth that is carbon-free.

Altunina&Alieva (2021) conducted a study on Current trends in the development of a green finance system.Green growth and sustainable development are becoming global ideologies that are directing the change of national economies. The emphasis is shifting away from quantitative performance evaluations and towards rational choice conditions. Rationality is becoming the deciding element in long-term green growth, and a reform in the financial paradigm that underpins such growth may be required. As a result, the most pressing issues of sustainable growth are, on the one hand, the transformation of the financial system and, on the other, the development of a new financial paradigm based on the principles of responsible investment and corporate social responsibility. The purpose of this research is to investigate the theoretical and practical issues of developing a national green finance model to ensure long-term growth in the Russian Federation.

Khatun, Sarker& Mitra (2021). Conducted a study on Green banking and sustainable development in Bangladesh. The banking sector is critical to Bangladesh's economic development. Given the problems posed by the rapid pace of climate change, banks are becoming more than just financial intermediaries; they are now involved in environmental protection and broader eco-system risk management (Intergovernmental Panel on Climate Change, 2014; Ullah, 2013). Banks must take a more direct role in tackling and absorbing

climate change in order to be effective (Sarker et al., 2019; Stephens & Skinner, 2013). Given the Sustainable Development Goals (SDGs) and their alignment and dependence on both sustainability and the current economic system, some have argued that achieving the SDGs will be extremely difficult without a robust banking system (Khatun, 2019; Rahman & Barua, 2016; Sahin et al., 2014).

Ellahi, Jillani& Zahid (2021) conducted a study on Customer awareness on Green banking practices. Green banking is a new concept in the Pakistani economy. The goal of this study is to track the advancement of green banking practises in the banking industry. It attempts to investigate the individual's perception and response to the green practises employed by banks. The purpose of this exploratory study is to discover the relationship between green banking awareness and clients. As a measurement model, the Structural Equation Model (SEM) is utilised, and 400 responses were acquired using the convenience sampling technique. The study's findings indicate that customers are open to and willing to adopt the changes brought about by the banks' green initiatives.

Setiawan (2021) conducted a study on Green finance in Indonesia's low carbon sustainable development. This article focuses on Indonesia's commitment to and struggles with achieving low carbon development goals, which are essential for both its own national development sustainability and the global effort to mitigate and adapt to the effects of climate change. Indonesia is a developing nation and one of the top ten global contributors of greenhouse gases. Due to its awareness of how climate change-related disasters affect the viability of its own national development, Indonesia has made international commitments and established extensive domestic programmes to cut greenhouse gas emissions. These initiatives have yielded unprecedented outcomes, especially in the energy and forestry sectors—the two areas most crucial to the country's greenhouse gas emissions.

Miah, Rahman & Mamoon (2021). Conducted a study on Green banking: The case of commercial banking sector in Oman.Financial institutions are in a unique position to lead the way in establishing and sustaining a green revolution for the globe. These institutions can develop a 'go-green' policy for themselves and urge client enterprises to do the same through various incentive systems. The purpose of this article is to investigate the degree of activity

and effort put forth by commercial banks in Oman. The research will also look into how these institutions differ from one another in terms of environmental performance and what factors influence their performance. In doing so, we review banks' audited financial statements for environmental disclosure. According to our preliminary findings, most banks include no reference of the 'environment' or 'green banking' in their financial accounts.

Iqbal et al 2021) conducted a study on Assessing the role of the green finance index in environmental pollution reduction. The switch to green energy will require a large amount of green funding in order to reduce global warming. Using a common weight DEA composite indicator, we developed a green finance index to evaluate the combined effects of financial, environmental, and energy-related variables. As a result, the values of the green finance index range from 0.98 to 0.71. Based on the results, Australia came in third place with a score of 0.98, while Malta came in last place with a score of 0.71. Iceland and Nepal both scored 1.00. India has a score of 0.15, and the United Kingdom is at 0.23. The study's conclusions shed light on how green finance contributes to the decrease of environmental pollution.

Akomea et al (2022) conducted a study on A review of studies on green finance of banks, research gaps and future directions. The focus of academics and policymakers on green finance has recently increased in response to global concerns about climate change, sustainable development, and environmental preservation. This paper evaluates previous research on green finance in the banking industry, concentrating on green finance factors and products. 46 pertinent studies were summarised and critically evaluated using the content analysis method. The primary green finance products offered by banks were determined to be green securities, green investments, green insurance, green credit, green infrastructure bonds, and climate and carbon finance.

Rahman et al (2022) conducted a study on A systematic review of green finance in the banking industry. There is a growing global interest among academics and professionals to ascertain the connection between environmental sustainability and finance. Nevertheless, very few studies have examined and arranged the data that is currently available in relation to green finance in developing-country banks. Based on a comprehensive analysis of the literature, our research aims to identify important aspects of green finance and areas in need of further investigation. Thus, with a focus on sustainable development and green finance,

this study assesses previous research on green finance in the banking sector. This study analyses and summarises 53 earlier publications on the subject of green finance using the content analysis method.

Mishra &Aithal (2022) conducted a study on An Imperative on Green Financing in the Perspective of Nepal. Nepal is a developing country where the budget gap is plainly visible [1, 2]. Because Nepal has a small globe and diverse environment, the scope of green financing may be enormous under the Kyoto Protocol, as there is no industry, but possessing many raw materials may be advantageous for industry. The naturalecological factor is one of the most important macro-environmental elements, and it has an effect, either directly or indirectly, on the growth of industry all over the world because the resources for industrial operations come from the environment, and waste from the environment settles to the same in one or different processes through different processes.

Azad et al (2022) conducted a study on Revisiting the Current Status of Green Finance and Sustainable Finance Disbursement. Although Bangladesh is still in the early phases of the green finance paradigm, the international financial sector is becoming interested in it. More than ever before, Green Finance and Sustainable Finance are attracting the attention of academics, researchers, politicians, and the supply and demand sides of these funds. Setting sustainable development as a top priority is necessary for market players to build a greener economy. All banks and NBFIs must disburse financed loans equal to or greater than 5% in green financing and 20% in sustainable financing, per BB policy guidelines. This study looks into Bangladesh's banks and NBFIs' most recent target achievement scenario for green and sustainable finance for the year 2021 (four quarters).

Khan et al (2022) conducted a study on Impediments of green finance adoption system: Linking economy and environment. Globally, environmental deregulation has grown to be a serious threat to public health. The focus has shifted to green practices due to increased pollution and ecological degradation, which are doable if the sustainable green finance system is fully implemented. However, prior studies have discovered that specific conditions are affecting its implementation, especially in developing countries. The aim of this study is to determine and measure the obstacles to putting in place a green finance system. Initially, a thorough review of the literature and semi-structured interviews with experts in the fields of financial management, economics, and environmental sciences revealed twenty obstacles. After the panel experts reached a consensus, eighteen criteria were finalised and used to analyse how they interacted with one another using Interpretive Structural Modelling (ISM).

Dai, Siddik& Tian (2022) conducted a study on Corporate social responsibility, green finance and environmental performance. The purpose of this research is to investigate the effect of Corporate Social Responsibility (CSR) and Green Finance (GI) on the Environmental Performance (EP) of financial institutions in emerging countries such as Bangladesh. In addition, the study investigates the role of green innovation (GI) as a mediator in the existing relationship between CSR, GF, and EP. Structured questionnaires were used to collect data from 357 commercial bankers in Bangladesh. In the study of the gathered primary data, a structural equation modelling approach was used, and the results revealed that CSR had a large beneficial impact on GI and EP, whereas GI strongly boosts EP. Furthermore, the results showed that GF had a considerable favourableaffect on GI and EP.

Bhatnagar, Taneja &Özen (2022) conducted a study on A wave of green start-ups in India— The investigation of green finance as an eco-friendly entrepreneurship support system. Environmental deterioration cannot occur at the price of economic development. The most practical strategy for promoting ecological and economic development is green financing. A sustainable development framework has been adopted by a number of summits and conferences for their action plans in an effort to address the pressing issue of climate change. The unique set of seventeen time-bound Sustainable Development Goals (SDGs) for 2030 aims to strike a balance between the three sustainability objectives of social, economic, and environmental sustainability. Analysis of India's present green funding situation and its impact on startups was the goal of this study. A number of case studies are used to illustrate the significance and possibility of success for green startups.

Mir & Bhat (2022) conducted a study on Green banking and sustainability. Green banking is quickly becoming a global standard for embracing socially and environmentally responsible corporate practises. This banking is ecologically friendly because it prevents environmental degradation and makes the earth more habitable. Green banking has become a buzzword in the field of sustainable banking over the previous few decades. In actuality, green banking is

recognised as sustainable banking, which contributes to environmental protection while ensuring long-term economic growth (Islam, Roy, Miah, & Das, 2020). To conserve and green our environment, we must execute some practical actions at the business level, such as focusing on environmental considerations and implementing greening activities at the corporate level (Islam, 2020).

Gunawan, Permatasari, & Sharma (2022) conducted a study on Exploring sustainability and green banking disclosures. This study analyses the sustainability and green banking performance of Indonesian banking sectors based on disclosures in sustainability reports over a nine-year period. The data show that sustainability and green-banking disclosures are still evolving year after year. Economic disclosures are the most common, whereas environmental disclosures are the least common.Using a content analysis method, this study employs the Global Reporting Initiatives (GRI) sustainability disclosure criteria and the Measuring Green Banking Practises guidelines developed by Shaumya and Arulrajah (2016). Combining these two metrics resulted in a more thorough disclosure list as recommendations. This work is significant because it will add to the literature on green banking, which is now lacking.

Al-Badran (2022) conducted a study on Using Green Finance for Attaining Sustainability: A Comparative Study Of The Iraqi Private Banks. The environmental harm caused by the depletion of natural resources necessitates a swift transition from the brown economy to the green economy due to the current century's economic growth. It's time for banks to quickly embrace green financing by allocating a sizeable portion to environmentally friendly projects. The goal of the current study was to look into the green financing practices of Iraqi private banks that are listed on the Iraqi Stock Exchange. The study used a quantitative approach, sampling fifteen private banks while intentionally gaining access to them in order to gather information through the disclosure of green banking products. Three trends in green financing were identified by the data analysis for the years 2018–2020: rising, falling, and staying the same.

Nguyen et al (2023) conducted a study on Green financing for sustainable development: Insights from multiple cases of Vietnamese commercial banks. Although the governmental sector is widely regarded as the primary entity responsible for addressing climate change and ensuring sustainable development, private commercial banks are in a unique position to assist or shift capital towards green projects. This article intends to investigate the existing practises of how commercial banks contribute to the advancement of green business initiatives by adopting a qualitative research approach based on six commercial banks. As a result, this study investigates and identifies the facilitators and barriers in domestic and foreign commercial banks in Vietnam that promote green business activities. In addition to responding to recent calls for an examination into commercial banks' roles in enabling green finance.

Alharbi et al (2023) conducted a study on Green finance and renewable energy: A worldwide evidence.We show that green finance (green bonds) strongly promotes renewable energy development using a large sample of 44 nations from 2007 to 2020. Our findings are resistant to addressing cross-sectional dependence issues, allowing structural breaks, and employing a variety of alternative specifications and estimating approaches. The effect is stronger for green bonds issued to finance alternative energy when compared to our baseline findings. We also discover that the current stock of technological capability considerably enhances the impact of green finance on renewable energy generation, particularly over time. Green financing has a greater long-term impact in nations with higher emissions per dollar GDP, higher degrees of climate change exposure to the economy and human lives, and more developed credit markets.

Jahanger et al (2023) conducted a study on Going away or going green in ASEAN countries: Testing the impact of green financing and energy on environmental sustainability. Green finance's job is to develop green industrial mechanisms in areas such as transportation, building, water conservation, clean energy production, storage, and distribution, resulting in reduced emissions and waste, biodiversity habitat protection, and pollution control. Recognising the importance of green finance, this study investigates the asymmetric role of green finance and clean energy in reducing carbon emissions alongside economic growth, foreign direct investment, and urbanisation as control antecedents in ASEAN nations using the econometric model of "non-linear autoregressive distributed lag (NARDL)" for the period 2000-2020. According to the NARDL findings, positive shocks from green finance and clean energy improve environmental quality while negative shocks impair it. Furthermore, economic expansion and urbanisation contribute to the production of dangerous pollutants. Markhayeva et al 2023) conducted a study on Green banking tools for the implementation of a state's environmental policy.Financial support is required for the active implementation of climate change initiatives, the newest technology that saves resources and the environment, and environmental policies for the green growth of national economies. Due to an increase in banking institutions' operational activities aimed at introducing green projects based on environmentally and socially responsible financing principles, financial resources for environmental investments and innovations are currently rising. In the world of finance, this contemporary movement is becoming more popular in locations where it is still uncommon, such as the Russian Federation and the Republic of Kazakhstan. It is referred to as "green banking." The best instruments for putting the green banking mechanism into practice in Kazakhstan and Russia are the study's main objective.

Amin et al (2023) conducted a study on Green finance continuance behavior: the role of satisfaction, social supports, environmental consciousness, green bank marketing initiatives and psychological reactance. Over the previous few decades, financial and economic crises, together with climatic and environmental changes, have heightened the rising importance of sustainability, current marketing practises, and creative techniques for a nation's development. As a result, the banking business has undergone a metamorphosis in response to market expectations for sustainability, inventiveness, and modern marketing capabilities. Furthermore, the credit crisis has called into question the effectiveness and stability of traditional banking, mandating the full incorporation of ethical ideals and principles into banking practises (Lymperopoulos et al., 2012; Kumar et al., 2022).

Aulia, Febriyanti&Umi (2023) conducted a study on Trend Analysis Of ESG Disclosure On Green Finance Performance In Indonesia, Malaysia &Singapore Exchanges.Since green finance has the potential to ensure sustainable economic growth through the conservation of natural resources, it is a relatively new topic in the banking industry. The goal of this research is to identify the variables that affect financial performance when ESG issues are published. This will allow corporate management to draw conclusions from the study that could benefit banks either directly or indirectly. Company value serves as an intervening variable while the author gathers independent research-related factors like operational and financial performance. The banking sector businesses listed on the stock exchanges in Singapore, Malaysia, and Indonesia make up the study's population.

Miah et al (2023) conducted a study on Innovative Policy Approach to Environmental Resource Management Through Green Banking Activities. Green Banking (GB) plays a proactive role in the welfare economy by incorporating environmental and ecological factors into asset quality and long-term return rates. The primary field of GB's achievements is environmental investment. Yet, for long years, British authorities have been confronted with a critical global issue: the exploitation of sensor networks through internet banking. The research aims to reexamine the major banking network security instruments that have been strengthened by authorised green investment for environmental management within and around the Lawachara National Park's survey and field experiment in Bangladesh's Moulvibazar district.

Manoj, & Kumari (2023) conducted a study on Green Banking Practices and Strategies for Sustainable.The emerging global economy has created more severe conditions, leading to ecological imbalances in the country. The evolving society has recognised the need for more sustainable ecological balance in order for future generations to live in a healthier environment. With this in mind, the company is also focused on environmental sustainability and working for environmentally friendly production processes and practises.The banking industry, which provides services to businesses and individuals in India, is also taking significant steps to reform its banking practises in order to adopt environmental sustainability practises by implementing green banking strategies and paving the way for green finance.

Udeagha&Muchapondwa (2023) conducted a study on Green finance, fintech, and environmental sustainability. The BRICS region has placed a strong focus on environmental sustainability in terms of policy. The primary cause of environmental degradation in the region is the continued reliance on fossil fuels to meet local energy demands. Reducing the region's dependence on fossil fuels can be difficult because historically, the area has been a major importer of these resources.Consequently, the BRICS nations' greenhouse gas (GHG) emissions have been steadily rising over time. In addition, the area contains a vast amount of untapped renewable energy sources that can be used to produce electricity without harming the environment.

Hassan & Rahman (2023). Conducted a study on Green Banking: Present Status and Prospects-A Study on Bangladesh. The idea of "Green Banking" has gained traction in the

banking and financial sectors as well as with the general public during the past few decades. This essay aims to illustrate the state of green banking practices today, their historical development, and the various green initiatives Bangladeshi banks have put in place to guarantee environmental sustainability. The study concludes that Bangladeshi banks are doing well in practicing sustainable baking while adhering to Bangladesh Bank's specific guidelines. This is achieved through content analysis of Bangladesh Bank's (the Central Bank of Bangladesh) annual reports, the annual review report of green banking activities, and the annual review report of Direct and Indirect Investment to Green Finance and Climate Risk Fund (CRF).

# **CHAPTER 3: THEORETICAL FRAMEWORK**

## 3.1 INTRODUCTION

A paradigm change towards sustainability is critical in the constantly changing finance landscape, and the banking industry is leading the way in this revolutionary journey. By adopting a sustainable strategy for green financing, banks are essential in directing capital toward eco-friendly projects. This involves promoting a resilient and environmentally sustainable economy in addition to reducing the risks related to climate change. In the finance industry, green financing refers to calculated bets on sustainable infrastructure, conservation initiatives, and renewable energy sources. Banks that match their financial operations with environmental objectives not only support global sustainability but also establish themselves as major actors in a future where ecological sustainability and economic growth coexist.

#### 3.2 MEANING

In the banking industry, green finance represents a new financial paradigm in which organizations actively promote ecologically friendly projects. This strategy entails allocating funds to enterprises and initiatives that have a good environmental impact. Projects utilizing renewable energy, energy-saving techniques, and programs encouraging sustainable behaviors across industries are typical focal points. The idea behind green finance is to use the financial sector's clout to address the growing environmental issues, especially climate change..

This means that environmental, social, and governance (ESG) considerations must be incorporated into decision-making procedures in the banking industry. Financial institutions make sure that their investments are in line with sustainable and ethical principles by doing this. Beyond merely following the law, the dedication to green funding shows initiative in supporting environmentally responsible behavior. Green finance has advantages for the environment, but it can also improve long-term economic stability by promoting adaptability to risks associated with climate change. Additionally, it satisfies growing investor and customer aspirations for ethical and ecological company operations.

#### 3.3 DEFINITION

In the finance industry, "green financing" refers to the allocation of funds to support projects and activities that are environmentally friendly. This strategy entails incorporating environmental factors into financial organizations' decision-making processes in order to match their lending and investing operations with social and ecological responsibilities.Green financing's primary goal is to address the pressing issues brought on by environmental deterioration and climate change. By allocating funds to initiatives that benefit the environment, banks are essential to this paradigm change. These initiatives usually fall into one of the following categories: sustainable agriculture, energy efficiency, biodiversity conservation, renewable energy, and climate-resilient infrastructure.

One prominent instrument in green financing is the issuance of green bonds. These are debt securities specifically earmarked for financing environmentally friendly projects. Investors in green bonds are not only seeking financial returns but also contributing to initiatives that promote sustainability and mitigate climate-related risks. The proceeds from green bonds are ring-fenced to ensure they are used exclusively for qualifying projects, providing transparency and accountability in the allocation of funds.

Financial institutions engaged in green financing often develop robust frameworks to assess and manage environmental and social risks associated with their investments. These frameworks involve evaluating the potential impact of projects on ecosystems, communities, and climate change. By incorporating sustainability criteria, banks ensure that their financial support is channeled toward projects that meet predefined environmental standards. One well-known instrument in green financing is the issuance of green bonds. These loan products are specifically intended to finance environmentally friendly projects. Investors in green bonds support initiatives that promote sustainability and lower the risks connected with climate change in addition to seeking financial returns. Profits from green bonds are ringfenced to ensure that they are only used for projects that have been approved, encouraging transparency and accountability in the allocation of funds.

#### 3.4 ADVANTAGES

Green financing in the banking sector offers numerous advantages, both for financial institutions and the broader community:

There are many benefits to using green financing in the banking industry. The first is that it has a very favorable effect on the environment. Financial institutions play a crucial role in encouraging ecological conservation and lowering carbon footprints by allocating financing

to projects centered on energy efficiency, renewable energy, and sustainable infrastructure. This promotes a more sustainable and responsible approach to economic development and is consistent with international efforts to combat climate change.

Green financing provides a strategic route for market positioning in addition to risk minimization. In a time when people are becoming more mindful of the environment, banks that actively promote green initiatives stand out in the marketplace. This not only draws clients who care about the environment, but it also establishes these financial institutions as pioneers of sustainable banking, building reputation and long-term brand loyalty.

One significant benefit is that it is compliant with changing incentives and rules. Incentives for sustainable practices are being introduced in many regions, and banks that embrace green financing not only comply with regulatory obligations, but also put themselves in a position to benefit from related subsidies, incentives, and preferential treatment.

Social responsibility is embodied in green financing. The active support of environmental projects by banks is essential in meeting the expectations of society for moral and responsible business conduct. This demonstrates the bank's dedication to the welfare of the communities it serves and is in line with the larger objectives of striking a harmonious balance between environmental preservation and economic success.

#### 3.5 DISADVANTAGES

Green financing has drawbacks even if it plays a crucial role in encouraging ecologically friendly behavior in the financial industry. Gaining an understanding of these disadvantages is essential to conducting a thorough analysis of the difficulties involved in incorporating green initiatives into financial systems.

The possibility of "greenwashing," in which financial organizations inflate or falsify the environmental advantages of their investments in order to draw in socially concerned investors, is one significant drawback. This may jeopardize the real impact on sustainability and damage the legitimacy of green funding initiatives.

One of the issues in designating "green" initiatives is the absence of defined standards. The adoption of disparate criteria by different banks can make it challenging to compare the environmental impact of investments. In the absence of widely acknowledged standards, investors may become confused and green financing may be less successful in producing predictable and quantifiable outcomes.

Certain green initiatives may not be financially viable, which puts banks at risk. The banking industry may suffer financial losses as a result of investing in developing green technologies or projects, which may not always provide the anticipated returns due to the inherent uncertainties involved.

Uncertainty in regulations may present difficulties for green finance. For financial institutions, uncertainty resulting from abrupt changes in environmental legislation or vague policies can make it difficult to navigate the regulatory environment and evaluate the long-term viability of green investments.

#### 3.6 FACTORS AFFECTING

The banking industry's adoption of a sustainable strategy for green finance is significantly impacted by a number of issues. Regulations are essential, and laws that are favorable to banks' adoption of eco-friendly operations serve as impetuses. Banks are driven to create and promote green financial products by market dynamics, which are impacted by the growing demand from consumers for ethical investments. Banking decisions are also heavily influenced by the perceived risks of sustainable projects and the overall financial feasibility of green efforts. The environment is further shaped by international agreements and government incentives, which give financial firms a framework and incentive for making sustainable investments. The future of green financing in the banking industry is shaped by a complex web of elements that includes technological breakthroughs, stakeholder engagement, and a bank's commitment to corporate social responsibility.

Transparency and Reporting Standards: Following transparent reporting guidelines in the green finance sector promotes accountability, fosters stakeholder trust, and makes it easier to monitor environmental effects.

Cost of cash: A bank's decision to engage in sustainable finance may be influenced by how much it costs to raise cash for environmentally friendly projects as opposed to more conventional ventures.

Customer education: Informing customers about how their financial decisions affect the environment and society can increase demand for eco-friendly goods and encourage banks to increase the range of sustainable products they offer.

#### 3.7 HARMONIC MEAN

A statistical metric called the harmonic mean is used to average a set of data and highlight the significance of smaller numbers. The reciprocal of the arithmetic mean of the reciprocals of individual values is how it is defined. The harmonic mean (H) of a dataset containing values  $x_1, x_2,..., x_n$  is calculated by dividing the total number of values by the sum of their reciprocals. It can be stated mathematically as follows:  $(H = \frac{1}{x_1} + \frac{1}{x_2} + \frac{1}{x_1} + \frac{1}{x_2} + \frac{1}{x_2} + \frac{1}{x_1})$ . The harmonic mean is particularly useful in situations when values' reciprocals are significant, like for determining resistances, rates, or speeds in a variety of fields.

The harmonic mean is more sensitive to outliers than the arithmetic mean because it assigns a higher weight to smaller numbers. Because of its sensitivity, it's a useful tool for working with rates and ratios because extreme values have a more noticeable effect on the harmonic mean. Its limits are as follows: the harmonic mean tends to be smaller than the arithmetic mean and is undefined if any of the numbers in the dataset are 0. It is useful in many areas, including engineering, finance, and physics, especially when reciprocals play a big role in the interaction. Knowing the harmonic mean gives one a more sophisticated understanding of data analysis and gives light on circumstances in which the significance of smaller numbers cannot be overlooked.

To calculate the harmonic mean for a set of values, you can use the formula: Harmonic Mean = n / (1/value1 + 1/value2 + ... + 1/valueN)

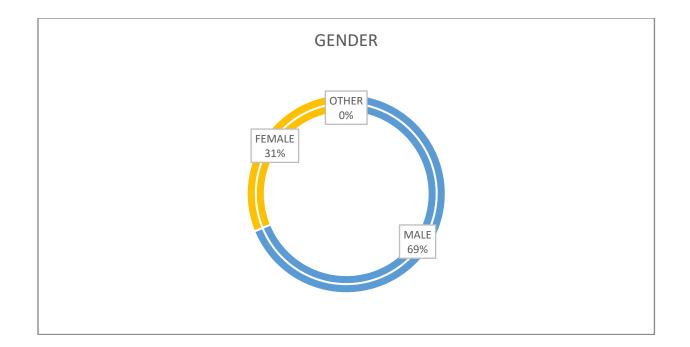
# CHAPTER 4: DATA ANALYSIS AND INTERPRETATIONS

## 4.1 CLASSIFICATION ON THE BASIS OF GENDER

## TABLE 1

GENDER	NO. OF RESPONDENTS	PERCENTAGE %
MALE	53	68.80
FEMALE	24	31.20
OTHERS	0	0

## CHART 1



### **INTERPETATION**

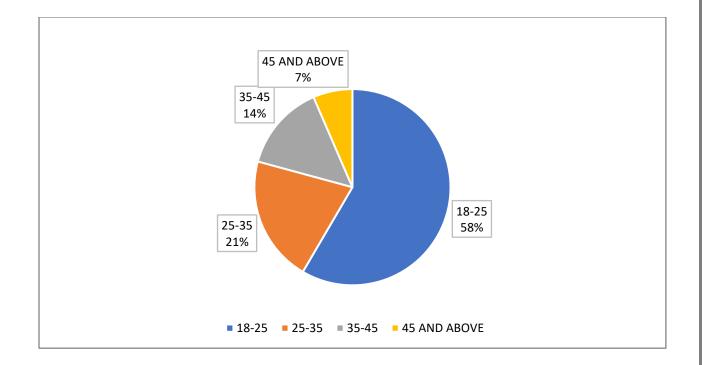
From the above table percentage of male is 69%, female is 315 and other has 0%. This concludes that male have responded more than female respondents.

## 4.2 CLASSIFICATION ON THE BASIS OF AGE GROUP

## TABLE 2

AGE GROUP	NO. OF RESPONDENTS	PERCENTAGE%
18-25	45	58.40
25-35	16	20.80
35-45	11	14.3
45 AND ABOVE	5	6.50

#### CHART 2



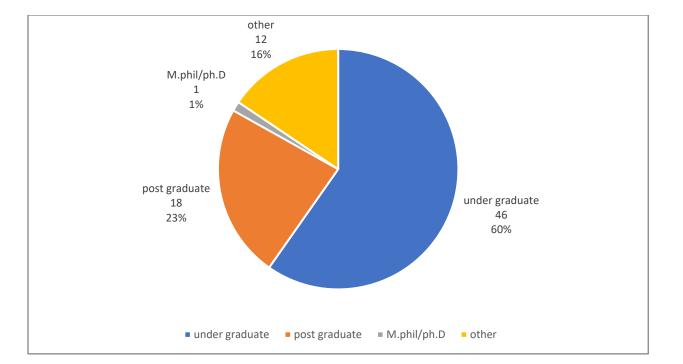
#### **INTERPERTATION**

From the above table it is understandable that 18-25 age group have been responded than other three age groups.

## 4.3 CLASSIFICATION ON THE BASIS OF GRADUATION LEVEL

## TABLE 3

GRADUATE	NO. OF RESPONDENTS	PERCENTAGE%
under graduate	46	59.70
post graduate	18	23.40
M.phil/ph.D	1	1.30
other	12	15.60



#### CHART 3

#### **INTERPRETATION**

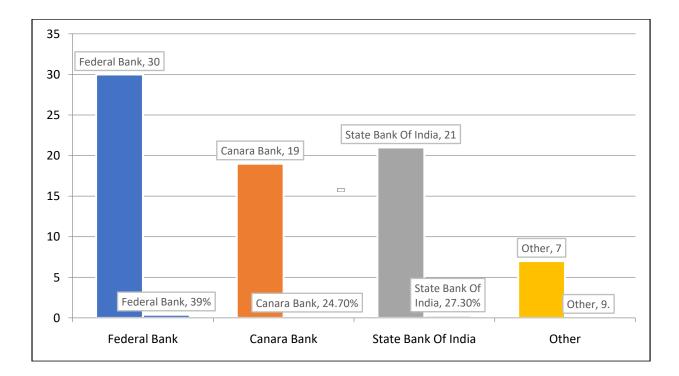
From the above table we got more respondents from undergraduates which has 60% of respondents than other graduate level.

## 4.4 <u>CLASSIFICATION ON THE BASIS OF BANK ACCOUNTS OF THE</u> <u>CUSTOMERS</u>

#### TABLE 4

BANK ACCOUNT	NO. OF RESPONDENTS	PERCENTAGE%
Federal Bank	30	39
Canara Bank	19	24.70
State Bank Of India	21	27.30
Other	7	9

#### CHART 4



#### **INTERPRETATION**

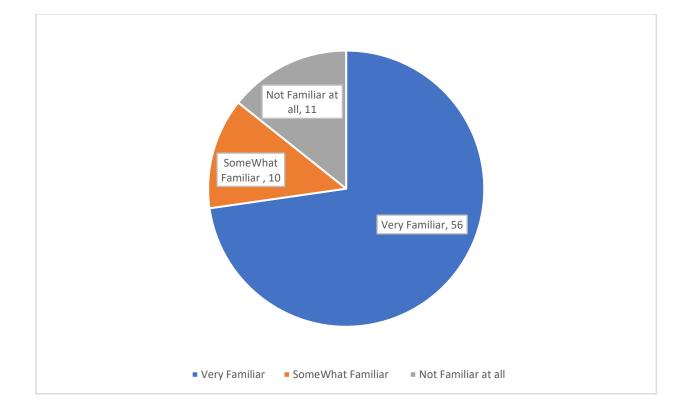
Based on the information provided in Table 4, it appears to show a classification of respondents based on their bank accounts. The data indicates the number of respondents and the percentage distribution for each bank. Federal Bank has the highest representation at 39%, followed by State Bank of India at 27.30%, Canara Bank at 24.70%, and 9% for other banks.

## 4.5 FAMILIARITY WITH GREEN FINANCING CONCEPT

## TABLE 5

CATEGORY	NO. OF RESPONDENTS	PERCENTAGE%
Very Familiar	56	72.70
SomeWhat Familiar	10	13
Not Familiar at all	11	14.30

## CHART 5



#### **INTERPRETATION**

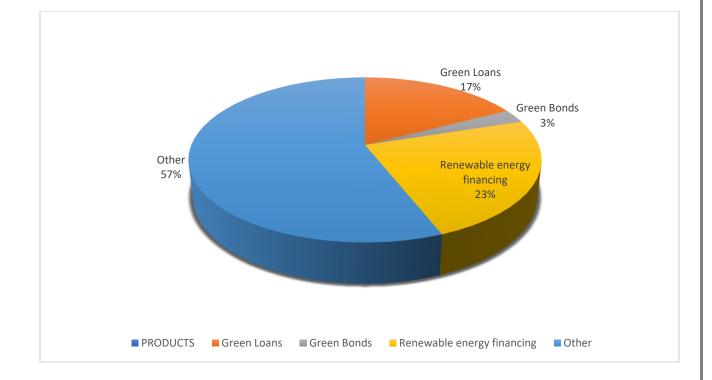
It shows that a sizable majority of respondents, 72.70%, are well familiar with the idea of green funding based on the data in Table 5. A lower percentage, 13%, said they were only vaguely familiar with green financing, while 14.30% said they had no knowledge of it at all. This implies that the people who responded to the poll had a notable awareness and comprehension of green financing.

## 4.6 PREFERRED GREEN FINANCING PRODUCTS USAGE

## TABLE 6

PRODUCTS	NO. OF RESPONDENTS	PERCENTAGE%
Green Loans	13	17
Green Bonds	2	3
Renewable energy financing	18	23
Other	44	57

#### CHARTS 6



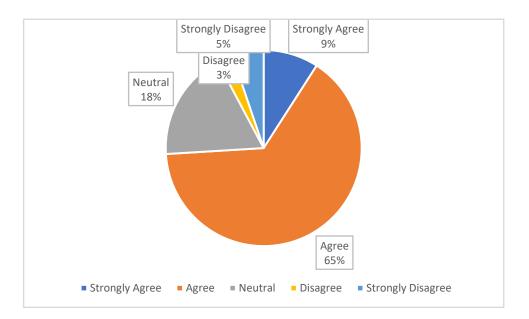
#### **INTERPRETATION**

From Table 6, it appears that the majority of respondents (57%) have used "Other" green financing products, suggesting a diverse range of options beyond specified categories. However, renewable energy financing is notable, with 23% of respondents using this specific product. Green Loans and Green Bonds have lower percentages of usage at 17% and 3%, respectively.

## 4.7 INTEREST IN IMPLEMENTING SUSTAINABILITY MEASURES IN BANKING INDUSTRY

## TABLE 7

CATEGORY	NO. OF RESPONDENTS	PERCENTAGE%
Strongly Agree	7	9
Agree	50	65
Neutral	14	18
Disagree	2	3
Strongly Disagree	4	5



#### CHART 7

#### **INTERPRETATION**

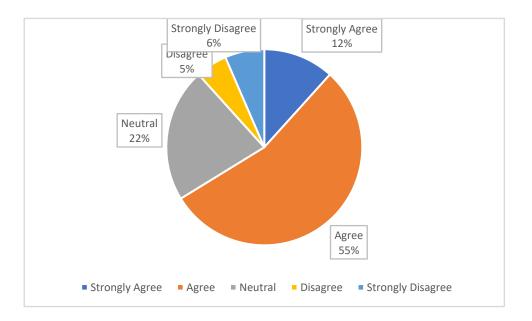
Table 7's findings make it clear that a sizable majority of respondents support the banking industry's adoption of more sustainable practices. 74% of respondents agree with the notion, with 9 percent strongly agreeing and 65 percent agreeing. Neutrality is shown by a smaller percentage (18%). On the other hand, just 8% of respondents strongly disagreed (5%) or disagreed (3%) with the idea of putting more sustainability measures in place. This indicates that respondents have a generally positive disposition toward improving sustainable practices in the banking industry.

## 4.8 PREFERENCE FOR BANKS PROMOTING GREEN AND SUSTAINABLE INITIATIVES

## TABLE 8

CATEGORY	NO. OF RESPONDENTS	PERCENTAGE%
Strongly Agree	9	12
Agree	42	55
Neutral	17	22
Disagree	4	5
Strongly Disagree	5	6

#### CHART 8



#### **INTERPRETATION**

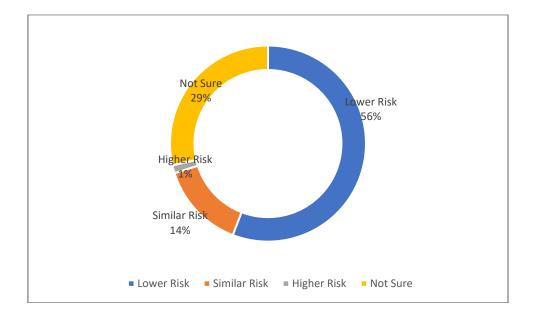
According to Table 8's findings, a sizable majority of respondents—67%, of whom 12% strongly agree and 55% agree—express a favorable disposition toward favoring a bank that actively supports environmental and sustainable activities. Notably, 22% of respondents have no opinion on this option. Just 10% of respondents either strongly disagree (6%), or disagree (5%) with the proposition. This shows that people who were surveyed had a widespread and significant preference for banks that actively support and participate in environmentally friendly and sustainable projects.

## 4.9 <u>RISK ASSESSMENT IN GREEN FINANCING VS. TRADITIONAL</u> <u>FINANCING</u>

<b>TABLE</b>	9

RISK	NO. OF RESPONDENT	PERCENTAGE%
Lower Risk	43	56
Similar Risk	11	14
Higher Risk	1	1
Not sure	22	29

#### CHART 9



#### **INTERPRETATION**

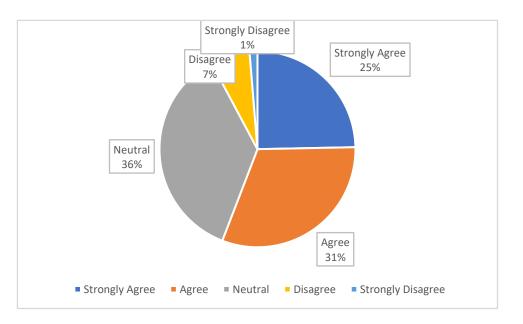
In Table 9, a significant majority of respondents (56%) perceive green financing to have lower risk compared to traditional financing. A smaller proportion (14%) sees similar risks, while only 1% believe green financing carries higher risk. Notably, 29% are unsure about the risk comparison, indicating a degree of uncertainty among respondents.

## 4.10 PERSONAL PERCEIVED BENEFITS OF GREEN FINANCING

#### TABLE 10

CATEGORY	NO. OF RESPONDENT	PERCENTAGE%
Strongly Agree	19	25
Agree	24	31
Neutral	28	36
Disagree	5	7
Strongly Disagree	1	1





#### **INTERPRETATION**

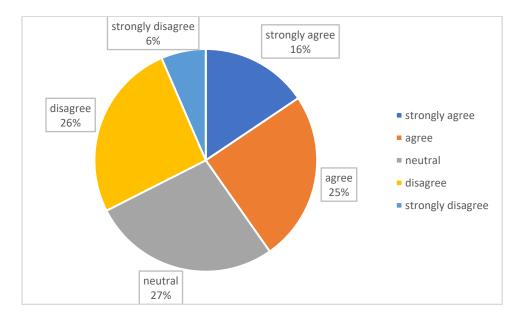
Table 10 presents noteworthy results indicating that a considerable proportion of participants, including 59.70% (26.40% strongly agree and 33.30% agree), believe that green funding is advantageous for them. 38.90% of respondents take a neutral position on the issue. Remarkably, not a single responder disputes, and a scant 1% strongly oppose the idea that green finance benefits them. This implies that respondents generally felt favorably about the advantages that green funding brought to their own lives.

## 4.11 CURRENT USAGE OF GREEN FINANCIAL SERVICES

#### <u>TABLE 11</u>

CATEGORY	NO. OF RESPONDENTS	PERCENTAGE%
Strongly agree	12	16
Agree	19	25
Neutral	21	26
Disagree	20	27
Strongly disagree	5	6

#### CHART 11



#### **INTERPETATION**

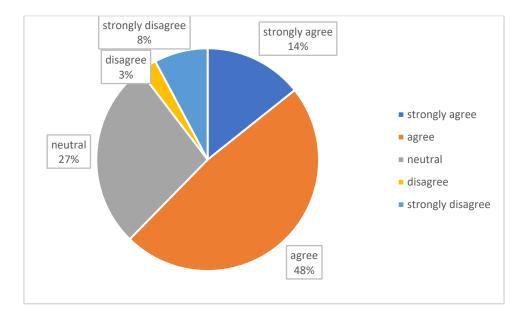
In Table 11, it's evident that a combined 41% of respondents either strongly agree or agree that they are currently using green financial services, such as green loans or sustainable investment options. However, a substantial portion (53% - neutral, disagree, strongly disagree) appears to have varying degrees of disengagement or uncertainty regarding the utilization of such services.

## 4.12 CONSIDERATION OF GREEN FINANCING PRODUCTS ADOPTION

#### **TABLE 12**

CATEGORY	NO. OF RESPONDENT	PERCENTAGE
Strongly Agree	11	14
Agree	37	48
Neutral	21	27
Disagree	2	3
Strongly Disagree	6	8

#### CHART 12



#### **INTERPRETATION**

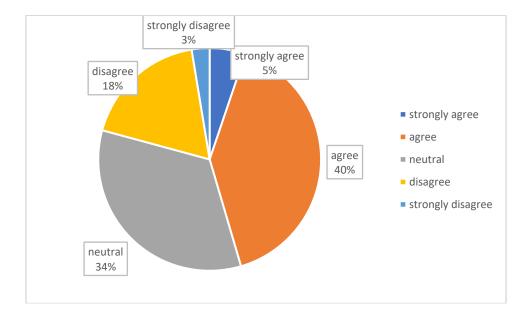
Table 12 suggests that a significant proportion of respondents (62% - Strongly Agree + Agree) have considered opting for green financing products. Meanwhile, 27% remain neutral, and a combined 11% express disagreement or strong disagreement, indicating a noteworthy level of interest in exploring green financing options among the majority of participants.

## 4.13 WILLINGNESS TO PAY HIGHER INTEREST FOR ENVIRONMENTAL INITIATIVES

#### **TABLE 13**

CATEGORY	NO. OF RESPONDENT	PERCENTAGE
Strongly Agree	4	5
Agree	31	40
Neutral	26	34
Disagree	14	18
Strongly Disagree	2	3





#### **INTERPRETATIONS**

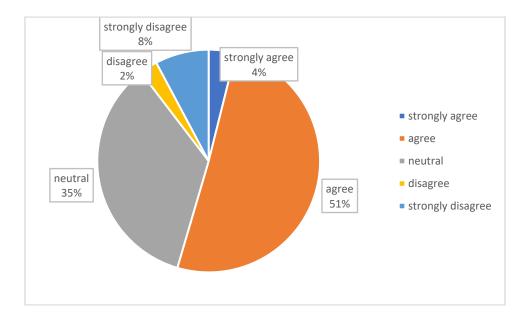
Table 13 indicates that a substantial portion of respondents (45% - Strongly Agree + Agree) are willing to pay a slightly higher interest rate for a green loan or mortgage supporting environmental initiatives. On the other hand, 21% express disagreement or strong disagreement, and 34% remain neutral on this willingness to pay a premium for environmentally supportive financing.

## 4.14 ADVOCATING FOR TRANSPARENCY IN ENVIRONMENTAL IMPACT

## TABLE 14

CATEGORY	NO. OF RESPONDENTS	PERCENTAGE%
Strongly agree	3	4
Agree	39	51
Neutral	27	35
Disagree	2	2
Strongly disagree	6	8

#### <u>CHART 14</u>



#### **INTERPRETATIONS**

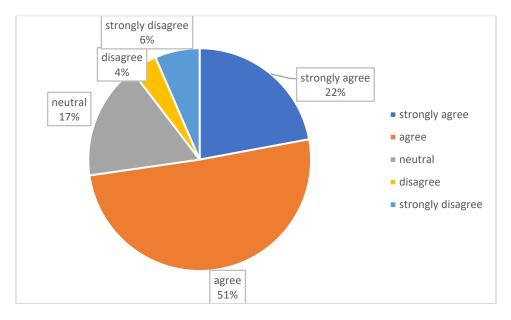
In Table 14, a substantial majority of respondents (55% - Strongly Agree + Agree) believe that the banking industry should be more transparent about the environmental impact of their financial products. A notable percentage (35%) remains neutral on this matter, while a combined 10% express disagreement or strong disagreement, indicating a prevailing sentiment towards increased transparency in disclosing environmental impacts.

## 4.15 <u>ENCOURAGING BANKS TO INVEST MORE IN</u> <u>ENVIRONMENTALLY FRIENDLY PROJECTS</u>

## **TABLE 15**

CATEGORY	NO. OF RESPONDENTS	PERCENTAGE%
Strongly agree	17	22
Agree	39	51
Neutral	13	17
Disagree	3	4
Strongly disagree	5	6

#### CHART 15



## **INTERPRETATIONS**

According to Table 15, there is a clear preference among respondents to believe that banks ought to put more money into ecologically beneficial projects. Just 10% (Disagree + Strongly Disagree) argue

# HARMONIC MEAN

1. I am aware of any green financial products or services provided by the bank.

To calculate the harmonic mean for a set of values, you can use the formula:

Harmonic Mean = n / (1/value1 + 1/value2 + ... + 1/valueN) In this case, n is 5, and the values are 5, 26, 37, 6 and 3. Harmonic Mean = 5 / (1/15 + 1/26 + 1/37 + 1/6 + 1/3) Now, calculate the values within the parentheses: Harmonic Mean = 5 / (0.2000 + 0.0384 + 0.027 + 0.166 + 0.333) Harmonic Mean = 5 / 0.7644 Harmonic Mean  $\approx$  6.5410 (rounded to two decimal places) So, the harmonic mean of these five values is approximately 6.5.

#### **INTERPRETATION**

The interpretation for the calculated Harmonic Mean of the values 5, 26, 37, 6, and 3 is as follows:

The Harmonic Mean, approximately 6.54, provides a measure that emphasizes lower values in the dataset. In this context, it indicates that, considering the reciprocal relationship of the numbers, the "average" impact of these values is around 6.54. This metric is sensitive to smaller values, and in this case, it reflects the combined influence of the given set, producing an average that may be lower than the arithmetic mean.

2. I am familiar with the concept of green financing?

Strongly agree: 9 Agree: 47 Neutral: 15 Disagree: 3 Strongly disagree: 3

To calculate the harmonic mean for a set of values, you can use the formula:

Harmonic Mean = n / (1/value1 + 1/value2 + ... + 1/valueN) In this case, n is 5, and the values are 9, 47, 15, 3 and 3. Harmonic Mean = 5 / (1/9 + 1/47 + 1/15 + 1/3 + 1/3)Now, calculate the values within the parentheses: Harmonic Mean = 5 / (0.111 + 0.0212 + 0.066 + 0.333 + 0.333). Harmonic Mean = 5 / 0.8642Harmonic Mean  $\approx 5.785$  (rounded to two decimal places So, the harmonic mean of these five values is approximately 5.7.

#### **INTERPRETATION**

The Harmonic Mean, approximately 5.7, reflects the combined strength of agreement across the surveyed responses. In this context, it indicates that the "average" level of agreement, considering the reciprocal relationship of the responses, is around 5.7. This metric is sensitive to lower values, suggesting that while there is generally agreement, the presence of some lower agreement scores has a noticeable impact on the overall harmonic mean.

3. Would you like to implement more sustainability measures in banking industry

Strongly agree: 7 Agree: 50 Neutral: 14 Disagree: 2 Strongly disagree: 4

To calculate the harmonic mean for a set of values, you can use the formula:

Harmonic Mean = n / (1/value1 + 1/value2 + ... + 1/valueN) In this case, n is 5, and the values are 7, 50, 14, 2 and 4. Harmonic Mean = 5 / (1/7 + 1/50 + 1/14 + 1/2 + 1/4) Now, calculate the values within the parentheses: Harmonic Mean = 5 / (0.142 + 0.02+ 0.0714 + 0.5 + 0.25. Harmonic Mean = 5 / 0.9834 Harmonic Mean  $\approx$  5.084 (rounded to two decimal places So, the harmonic mean of these five values is approximately 5.084.

#### **INTERPRETATION**

The Harmonic Mean, approximately 5.084, signifies the combined strength of respondents' inclinations. In this context, it indicates that the "average" level of willingness, considering the reciprocal relationship of the responses, is around 5.084. This metric is sensitive to lower values, suggesting that while there is a general agreement, the presence of some lower agreement scores influences the overall harmonic mean. Overall, it suggests a positive inclination towards implementing sustainability measures in the banking industry.

4. Do you think green financing can have a positive impact on the environment?

Strongly agree: 16 Agree: 51 Neutral: 5 Disagree: 1 Strongly disagree: 4

To calculate the harmonic mean for a set of values, you can use the formula:

Harmonic Mean = n / (1/value1 + 1/value2 + ... + 1/valueN) In this case, n is 5, and the values are 7, 50, 14, 2 and 4. Harmonic Mean = 5 / (1/16 + 1/51 + 1/5 + 1/1 + 1/14) Now, calculate the values within the parentheses: Harmonic Mean = 5 / (0.0625 + 0.0196 + 0.2 + 1 + 0.0714. Harmonic Mean = 5 / 1.3535 Harmonic Mean  $\approx$  3.694 (rounded to two decimal places So, the harmonic mean of these five values is approximately 3.6.

#### **INTERPRETATION**

The Harmonic Mean, approximately 3.694, reflects the combined strength of respondents' perspectives. In this context, it indicates that the "average" belief in the positive impact of green financing, considering the reciprocal relationship of the responses, is around 3.694. This metric is sensitive to lower values, suggesting that while there is a general agreement, the presence of some lower agreement scores has a noticeable impact on the overall harmonic mean. Overall, it suggests a moderate agreement that green financing can have a positive environmental impact.

5. Do you think governments should play a role in encouraging banks to adopt green financing practices?
Strongly agree: 13
Agree: 47
Neutral: 11
Disagree: 1
Strongly disagree: 5
To calculate the harmonic mean for a set of values, you can use the formula:

Harmonic Mean = n / (1/value1 + 1/value2 + ... + 1/valueN) In this case, n is 5, and the values are 7, 50, 14, 2 and 4. Harmonic Mean = 5 / (1/13 + 1/47 + 1/11 + 1/1 + 1/5 ) Now, calculate the values within the parentheses: Harmonic Mean = 5 / (0.0769 + 0.0212 + 0.0909 + 1 + 0.2 . Harmonic Mean = 5 / 1.389 Harmonic Mean  $\approx$  3.599 (rounded to two decimal places So, the harmonic mean of these five values is approximately 3.6.

#### **INTERPRETATION**

The Harmonic Mean, approximately 3.599, indicates the combined strength of respondents' opinions. In this context, it suggests that the "average" level of agreement on governments playing a role in encouraging green financing practices, considering the reciprocal relationship of the responses, is around 3.599. This metric is sensitive to lower values, implying that while there is a general agreement, the presence of some lower agreement scores has a discernible impact on the overall harmonic mean. Overall, it indicates a moderate agreement that governments should play a role in encouraging banks to adopt green financing practices.

# CHAPTER 5: FINDINGS, SUGGESTION AND CONCLUSION

This chapter shows the major findings, suggestions and conclutions of the study.

## 5.1 FINDINGS

- Gender Response Disparity: The data indicates a notable difference in response rates between genders, with 69% of respondents being male and 31% female. This suggests that males were more inclined to participate in the survey.
- Age Group Response Variation: The 18-25 age group showed higher participation compared to other age groups, indicating a stronger interest or awareness in the subject among younger individuals.
- Educational Level Influence: Undergraduates constituted the majority of respondents at 60%, highlighting a higher interest or awareness in green financing among this educational group.
- Awareness of Green Financing: A significant majority (72.70%) of respondents demonstrated a good understanding of green financing. However, 13% had only vague familiarity, and 14.30% had no knowledge, suggesting room for education and awareness campaigns.
- Bank Preferences: Federal Bank had the highest representation at 39%, followed by State Bank of India at 27.30%, and Canara Bank at 24.70%. This highlights varying preferences among respondents, potentially influenced by the banks' sustainability practices.
- Support for Sustainable PracticesA substantial 74% of respondents expressed support for the banking industry adopting more sustainable practices, indicating a positive disposition toward environmentally conscious initiatives.

- Preference for Green-Supportive Banks: 67% of respondents favored banks actively supporting environmental and sustainable activities, suggesting a market demand for eco-friendly banking practices.
- Perceived Benefits of Green Financing: A majority (56%) found green financing beneficial, with only a small percentage (8%) expressing reservations. This signals a positive perception of the advantages associated with green financial products.
- Usage of Green Financing Products: Respondents demonstrated diverse preferences in green financing products, with 57% using "Other" products, 23% opting for renewable energy financing, and lower percentages for Green Loans and Green Bonds.
- Risk Perception: A significant majority (56%) perceived green financing to have lower risks compared to traditional financing, indicating a positive risk perception associated with environmentally friendly financial products.
- Current Utilization of Green Financial Services: 41% of respondents claimed to be currently using green financial services, while 53% showed varying degrees of disengagement or uncertainty.
- Interest in Exploring Green Financing: A notable 62% expressed a willingness to consider green financing products, suggesting a considerable interest in exploring eco-friendly financial options.
- Willingness to Pay Higher Interest: 45% were willing to pay a slightly higher interest rate for a green loan or mortgage, indicating a willingness to invest in environmentally supportive financing.

- Transparency Expectations: A majority (55%) believed that banks should be more transparent about the environmental impact of their financial products, emphasizing the importance of disclosure and accountability.
- Funding Ecologically Beneficial Projects: A substantial 73% supported the idea of banks putting more money into ecologically beneficial projects, indicating a strong demand for financial institutions to contribute to environmental initiatives.

## **5.2 SUGGESTIONS**

- Here are some recommendations to assist clients who are unfamiliar with green financing in the banking industry:
- Do some research on the definition and operation of green funding first. You can find a tonne of articles, videos, and other internet resources that can assist you in comprehending the fundamentals.
- Get in touch with your bank or other financial organisation to find out more about their green financing choices. Request informational papers or make an appointment to speak with a professional who can go over the options.
- Find out how green financing may benefit your business and the environment. It can lower your carbon footprint, help you save money, and promote environmentally friendly projects.
- Establish your financial and environmental goals. This will assist you in selecting green financing solutions that suit your needs and ideals.
- Choose carefully the green finance option you choose. To determine which option is best for you, compare several offers, interest rates, periods, and eligibility requirements.

- Asking questions concerning the terms and conditions of green financing products is not something to be afraid of Verify that you know exactly what you're getting into.
- If you're unsure, think about speaking with a financial advisor or environmental specialist who can offer advice on financing options for green projects.
- Determine which particular initiatives or financial commitments fit your objectives for green financing. Energy could be a part of this.

Here are some recommendations for how banks can best educate their clients about green financing options:

- Create a page on your website dedicated to green financing. Give a thorough explanation of the advantages of the bank's green goods and services.
- Provide educational materials such as guides, videos, and articles that clarify the financial benefits, environmental impact, and principles of green financing. Provide easy access to these resources on your website.
- Educate clients on green financing by holding webinars and workshops in person or online. Ask professionals to talk about the financial and environmental advantages.
- Make sure all of your bank's staff members are knowledgeable about green financing options, particularly those who interact with customers. They ought to be qualified to offer advice and respond to inquiries from clients.
- Provide details regarding green financing in your online and in-branch marketing materials. Emphasise client success stories who have made use of these options.
- To co-host events, exchange information, and support green financing initiatives, collaborate with environmental NGOs or organisations.

- Give clients the option to arrange private consultations with specialists in green financing who can evaluate their requirements and suggest appropriate solutions.
- Publish news, case studies, and advice regarding green financing on the social media channels for your bank. Interact with clients and respond to their inquiries.

## **5.3 CONCLUSION**

The "Green Financing in the Banking Sector" project has shown the way towards a financial environment that is more ecologically conscious and sustainable. We explored the complex world of green finance and its significant effects on banks, clients, and the environment during this project. The crucial role that green financing plays in promoting positive change has been highlighted by our investigation.

As we come to the end of this project, it is critical to recognize that the banking industry not only promotes environmental responsibility but also growth in the economy. It's evident that there's a growing interest and support for green financing within the banking industry. With a notable gender response disparity, higher participation among younger age groups, and a majority demonstrating understanding and support for sustainable practices, there's a clear indication of the market's inclination towards environmentally conscious initiatives. Moreover, the willingness to explore green financing options, coupled with the perception of lower risks and benefits associated with such products, underscores the potential for further growth in this sector.

To conclude, both clients and banks stand to benefit from embracing green financing. Clients can reduce their carbon footprint, save money, and contribute to environmentally friendly projects, while banks can tap into a growing market demand, enhance their sustainability practices, and fulfill their corporate social responsibility objectives. By implementing the suggested recommendations, both clients and banks can navigate the landscape of green financing more effectively, fostering a mutually beneficial relationship that supports environmental conservation and financial growth.

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## **ANNEXURE**

- 1. Gender
  - a. Male
  - b. Female
  - c. Other

## 2. Age group

- a. 18-25
- b. 25-35
- c. 53-45
- d. 45 and above
- 3. Highest graduation level:
  - a. Undergraduate
  - b. Postgraduate
  - c. M.phil/Ph.D
  - d. Other
- 4. How familiar are you with the concept of green financing?
  - a. Very familiar
  - b. Somewhat familiar
  - c. Not familiar at all
- 5. In which bank do you have bank account?
  - a. Federal bank
  - b. Canara bank
  - c. State Bank Of India
  - d. Other

6. Which green financing product have you used more?

- a. Green loans
- b. Green bonds
- c. Renewable energy financing
- d. Other

7. How do you perceive the risk associated with green financing compared to traditional financing?

- a) Lower risk
- b) Similar risk
- c) Higher risk
- d) Not sure
- 8. I am aware of any green financial products or services provided by the bank.
  - a) Strongly agree
  - b) Agree
  - c) Neutral
  - d) Disagree
  - e) Strongly disagree
- 9. I am familiar with the concept of green Financing?
  - a) Strongly agree
  - b) Agree
  - c) Neutral
  - d) Disagree
  - e) Strongly disagree

10. Have you or your organization been Involved in green financing or sustainable Banking practices?

- a) Strongly agree
- b) Agree
- c) Neutral

- d) Disagree
- e) Strongly disagree
- 11. Would you like to implement more Sustainable measures in banking industry?
  - a) Strongly agree
  - b) Agree
  - c) Neutral
  - d) Disagree
  - e) Strongly disagree

12. Do you think green financing can have a Positive impact on the environment?

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

13. Are you willing to support green banking Practices, even if it means potential Changes in financial products and Services?

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

14. I have considered opting for a green Financing product?

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

15. I am currently using any green financial Services, such as green loans or Sustainable investment options?

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

16. I am willing to pay a slightly higher Interest rate for a green loan or mortgage that supports environmental initiatives?

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

17. Do you think the banking industry should Be more transparent about the Environmental impact of their financial Products?

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

18. Would you prefer a bank that actively Promotes green and sustainable initiatives?

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

19. Do you think governments should play a Role in encouraging banks to adopt green Financing practices?

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

20. Should banks invest more in Environmentally friendly projects?

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

21. Do you think green financing can Contribute significantly to addressing Environmental issues?

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

22. Should banks prioritize investments in Renewable energy projects over traditional Energy sources?

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

23. Do you believe that green practices in Banking can lead to long Term economic Benefits?

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

24. Does green financing strategy is to Promote environmentally responsible Business?

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree
- 25. Do you think green financing is beneficial For you?
  - f) Strongly agree
  - g) Agree
  - h) Neutral
  - i) Disagree
  - j) Strongly disagree