

Assessing Bank Employees' Awareness and Understanding of Green Finance Incentives and Sustainable Banking: A Study of Dehradun District, Uttarakhand

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Abstract

Green finance has become an important component of the modern banking system as financial institutions increasingly participate in environmental protection, climate-risk management and sustainable economic development. Banks influence sustainability not only through their internal operations but also through lending, investment and mobilization of financial resources. In India, initiatives such as green deposits, renewable-energy financing, green securities and climate-finance policies have strengthened the role of banks in supporting environmentally responsible economic activities.

The present study assesses bank employees' awareness and understanding of green finance incentives and sustainable banking practices in Dehradun district of Uttarakhand. The study focuses on employees' knowledge of green finance, green deposits, renewable-energy lending, sustainable banking practices, environmental risk considerations and relevant regulatory initiatives. It also examines whether employee awareness varies according to selected professional characteristics and whether training and institutional communication contribute to better understanding. The study proposes a questionnaire-based empirical investigation among employees of selected public-sector and private-sector banks operating in Dehradun district.

Employee awareness is important because banking policies are ultimately implemented through people working in branches, credit departments and customer-service functions. Employees with adequate knowledge can explain green financial products, identify appropriate financing opportunities and guide customers towards environmentally beneficial activities. The study therefore considers employee knowledge an important link between sustainable-finance policies and their practical implementation. The findings are expected to help banking institutions identify training requirements and strengthen the implementation of sustainable banking practices in Dehradun.

Keywords: Green Finance, Sustainable Banking, Green Deposits, Bank Employees, Renewable Energy Finance, Financial Awareness, Dehradun, Uttarakhand.

How to cite this article: Deepika Rawat¹ Dr. Anju Gairola Thapliyal². Assessing Bank Employees' Awareness and Understanding of Green Finance Incentives and Sustainable Banking: A Study of Dehradun District, Uttarakhand. Int J Drug Deliv Technol. 2026;16(83s):1071-1083. DOI: 10.25258/ijddt.16.83s.118.

1. Introduction

The banking sector plays an important role in economic development by mobilizing savings and directing financial resources towards productive activities. With increasing environmental concerns, the responsibilities of financial institutions have expanded beyond conventional financial performance. Banks are now expected to consider environmental risks and sustainability while making

lending, investment and strategic decisions. This development has contributed to the growth of green finance and sustainable banking.

Green finance refers broadly to the provision and mobilization of finance for activities that generate environmental benefits. Such activities may include renewable energy, energy efficiency, clean

transportation, sustainable water management, waste management and environmentally responsible infrastructure. Sustainable banking has a wider meaning because it involves incorporating environmental and sustainability considerations into lending, investment, risk management and general banking operations.

In India, the Reserve Bank of India has introduced several measures supporting the development of sustainable finance. Its Framework for Acceptance of Green Deposits, introduced in 2023, provides a regulatory structure for regulated entities that accept green deposits. The framework requires funds raised through such deposits to be allocated to eligible green activities and projects and also incorporates measures intended to improve transparency and address green washing.

Renewable energy is also included within India's priority-sector lending framework, creating an important connection between conventional banking requirements and environmentally beneficial activities. The current priority-sector framework recognizes renewable energy among the eligible categories subject to applicable conditions.

These developments indicate that green finance is gradually becoming part of mainstream banking rather than remaining a specialized environmental concept. However, the existence of regulations and financial products does not automatically ensure their effective implementation. Bank employees must understand the purpose, eligibility requirements and practical operation of green financial instruments. They are frequently the first point of contact for customers and therefore influence how financial products and institutional policies are communicated.

Employee awareness can be particularly important in relation to green finance because many customers may have limited knowledge of environmentally oriented financial products. A customer interested in installing solar equipment, purchasing an electric vehicle or undertaking an energy-efficient project may require guidance regarding available financing options. Employees who understand green finance can identify such opportunities and provide more appropriate information.

Dehradun district provides a useful setting for examining this issue. The district contains a diverse banking environment serving households, businesses, educational institutions, service-sector organizations and other economic activities. The continuing

development of urban and semi-urban areas also creates demand for energy, transport, construction and infrastructure. Consequently, financial support for environmentally responsible activities can have relevance within the district.

Uttarakhand's environmental characteristics further strengthen the importance of sustainable development. Issues related to natural resources, energy use, urban expansion and environmental vulnerability make responsible allocation of financial resources increasingly relevant. Banks can contribute by supporting renewable energy, energy efficiency, environmentally responsible enterprises and other sustainable activities.

The present study therefore shifts attention from the availability of green-finance policies to the knowledge of the employees expected to implement and communicate them. It examines whether bank employees in Dehradun are aware of green finance incentives and whether this awareness is accompanied by adequate understanding of sustainable banking practices.

2. Green Finance and Sustainable Banking

Green finance represents the environmental dimension of financial decision-making. It involves directing capital towards activities that provide environmental benefits while managing environmental and climate-related risks associated with financing. Green loans, green deposits, renewable-energy finance and green bonds are among the instruments associated with this area.

The concept of sustainable banking is broader. It involves incorporating sustainability into the overall functioning of financial institutions. Sustainable banking may include environmentally responsible lending, climate-risk assessment, efficient resource use within branches, paper reduction through digital banking, responsible investment and transparent sustainability reporting.

The distinction is important for the present study. An employee may have heard about green finance without understanding how it is implemented. Similarly, an employee may know about green deposits but have limited knowledge about eligible activities or the regulatory requirements governing allocation of proceeds. The study therefore examines awareness and understanding rather than treating them as identical.

The RBI's green-deposit framework provides a useful example. Green deposits are interest-bearing deposits for which the proceeds are earmarked for eligible green activities or projects. The framework requires regulated entities offering such deposits to establish appropriate policies and mechanisms concerning the use and monitoring of funds. It also addresses external review and reporting requirements.

For employees, knowledge of such provisions is important because product awareness alone may not be sufficient. Employees involved in customer service need to communicate product characteristics accurately, while employees involved in credit and investment decisions may need a more detailed understanding of environmental eligibility and risk.

3. Green Finance Incentives in India

Green finance incentives can include regulatory provisions, specialized financial products, priority-sector treatment, government-supported programs and investment mechanisms that encourage environmentally beneficial economic activities. These incentives do not necessarily provide a direct financial benefit to the employee or customer. Their purpose is generally to make sustainable activities more accessible to financial resources.

Green deposits are one important instrument. They allow participating financial institutions to mobilize deposits whose proceeds are directed towards eligible green activities. The RBI framework specifically identifies eligible areas and establishes requirements for transparency and monitoring.

Renewable-energy financing represents another important area. Renewable energy is included in the priority-sector framework, subject to specified conditions. This provides banks with an institutional mechanism through which eligible renewable-energy activities can receive financing within the broader priority-sector structure.

Green bonds also provide an avenue for financing environmentally beneficial activities. Sovereign Green Bonds, for example, are designed to mobilize resources for eligible public-sector green activities. Such instruments increase the range of sustainable investment opportunities within the financial system.

India's climate-finance policy framework is also developing. The Government of India released a draft Framework of India's Climate Finance Taxonomy in

2025 to facilitate capital flows towards climate-friendly and transition-related activities.

The growing number of instruments makes employee training increasingly important. Employees must be able to distinguish between different green-finance mechanisms and understand their basic purpose, eligibility and practical relevance.

Table 1. Selected Green Finance Mechanisms Relevant to Bank Employees

Green finance mechanism	Main purpose	Employee-level relevance
Green Deposits	Mobilize funds for eligible green activities	Product awareness and customer guidance
Renewable Energy Finance	Finance eligible renewable-energy activities	Identification of suitable financing opportunities
Priority-Sector Lending	Direct credit towards identified priority sectors	Understanding applicable lending conditions
Green Bonds	Finance eligible environmentally beneficial projects	Awareness of sustainable investment instruments
Environmental Risk Assessment	Identify environmental risks associated with financed activities	Responsible credit and risk assessment
Sustainable Banking	Integrate sustainability into banking operations	Broader institutional implementation

Source: Compiled by the researcher from Reserve Bank of India and Government of India policy documents.

4. Employee Awareness and Sustainable Banking

The successful implementation of sustainable banking depends partly on employee knowledge. Banking policies are developed at regulatory and institutional levels, but their practical application occurs through employees dealing with customers, loan applications, deposits, investments and daily branch activities.

Awareness can be understood as familiarity with the basic concepts and existence of green financial initiatives. Understanding goes further and involves knowledge of product characteristics, eligibility conditions, regulatory provisions and practical applications. This distinction forms an important basis of the present study.

Training is likely to influence both dimensions. Green finance is a developing field, and employees may not have received sufficient exposure to its concepts during conventional banking education or earlier professional training. Regular institutional training can improve knowledge of green products, environmental risk, regulatory developments and sustainable banking procedures.

Employee knowledge can also affect customer awareness. Customers may learn about green financial products through branch staff rather than through independent research. When employees can clearly explain available options, customers may become more willing to consider environmentally oriented financial products. Conversely, inadequate employee knowledge may reduce the visibility and utilization of such products.

The issue is particularly relevant at branch level because branch employees interact directly with households, entrepreneurs and local businesses. Potential financing requirements related to solar energy, energy-efficient equipment, electric mobility and other sustainable activities may be identified during routine customer interactions. Employees with adequate knowledge can recognize these opportunities and provide appropriate guidance.

Sustainable banking also requires employees to understand environmental risk. Environmental problems can affect borrowers and businesses through physical risks and changes in technology, regulation and market demand. Such developments may ultimately influence repayment capacity and financial risk. Employee awareness can therefore contribute not only to green lending but also to more informed banking decisions.

5. Review of Literature and Research Gap

Existing literature on green finance has examined the relationship between financial institutions and environmental sustainability, the development of green banking products, climate-related financial risks and the role of financial institutions in supporting low-carbon development. A common

theme is that banks influence environmental outcomes indirectly through the allocation of capital.

Research on sustainable banking has also emphasized the integration of environmental considerations into lending and risk management. Climate-related risks can affect financial institutions through borrowers, collateral, investment portfolios and broader economic conditions. This has increased the need for financial institutions to develop appropriate knowledge and organizational capacity.

Another important area of research concerns green financial products. Green deposits, green bonds, renewable-energy finance and sustainable investment products have expanded the range of environmentally oriented financial services. However, availability of products does not necessarily result in their effective adoption. Employee awareness, customer understanding, institutional communication and regulatory clarity can influence implementation.

The problem of green washing has also increased the importance of accurate knowledge. Financial products should not be described as green merely because they have a broad environmental association. Employees need sufficient understanding to communicate products correctly and avoid misleading information.

Despite growing research and policy attention, there is limited district-level evidence concerning bank employees' awareness of green finance incentives in Uttarakhand. Much of the existing discussion focuses on national policies, institutional practices or broad financial-sector developments. Less attention has been given to the employees who translate these policies into customer interaction and operational activities.

This creates the central research gap addressed by the present study. The study examines green-finance awareness at the employee level and focuses specifically on Dehradun district. It also distinguishes between basic awareness and deeper understanding and examines the possible influence of professional characteristics and training exposure.

6. Problem Statement

India's banking system is developing several mechanisms to support sustainable economic activity. Green deposits, renewable-energy lending, green securities and climate-finance initiatives provide

opportunities for financial institutions to contribute to environmental objectives. However, the practical success of these initiatives depends not only on regulations and institutional policies but also on the knowledge of employees who implement and communicate them.

Inadequate awareness may result in poor communication of green financial products, limited identification of eligible activities and reduced customer participation. Employees may know the term "green finance" without understanding its regulatory provisions, incentives or practical application.

The problem addressed by this study is therefore the limited empirical understanding of the level of awareness and understanding of green finance incentives and sustainable banking among bank employees in Dehradun district. The study seeks to identify existing knowledge levels, examine differences among employees and determine the role of training and institutional communication in strengthening sustainable banking awareness.

7. Objectives of the Study

The study aims to:

1. Assess the level of awareness of green finance among bank employees in Dehradun district.
2. Examine employees' understanding of green finance incentives and sustainable banking practices.
3. Assess awareness of green deposits, renewable-energy financing and other sustainable financial instruments.
4. Examine variations in awareness according to selected professional and demographic characteristics.
5. Identify major sources of information about green finance among bank employees.
6. Examine the role of training and institutional communication in improving employee understanding.
7. Identify major barriers to the implementation of sustainable banking practices.
8. Suggest measures for improving employee awareness and sustainable banking implementation in Dehradun district.

8. Research Hypotheses

The empirical component of the study will test the following hypotheses:

H1: Bank employees' awareness of green finance differs significantly according to their educational qualification.

H2: Bank employees' awareness of green finance differs significantly according to their work experience.

H3: Employees who have received formal training related to green finance demonstrate higher understanding of sustainable banking practices.

H4: Awareness of green finance is positively associated with understanding of sustainable banking practices.

H5: Awareness and understanding of green finance differ significantly between employees working in public-sector and private-sector banks.

9. Scope of the Study

The study is confined to bank employees working in selected banking institutions in Dehradun district, Uttarakhand. The focus is on awareness and understanding rather than on measuring the financial performance of banks or the environmental impact of individual lending decisions.

The study covers major concepts associated with green finance, including green deposits, renewable-energy financing, sustainable lending, green investment instruments, environmental risk and sustainable banking practices. Employee characteristics such as educational qualification, designation, work experience and training exposure will be considered where relevant to the analysis.

The research is intended to provide a district-level understanding of employee preparedness for sustainable banking. Its findings may be useful for banks, policymakers, trainers and researchers interested in strengthening green-finance implementation at the operational level.

10. Research Methodology

The study adopts a descriptive and analytical research design to assess bank employees' awareness and understanding of green finance incentives and

sustainable banking practices in Dehradun district. The descriptive component identifies the existing level of awareness, sources of information, training exposure and understanding of different green-finance instruments. The analytical component examines whether awareness and understanding vary according to selected employee characteristics and whether training is associated with better knowledge.

The study will use primary data collected directly from bank employees through a structured questionnaire. Secondary information will be obtained from Reserve Bank of India notifications and guidelines, Government of India documents, research articles, books, reports and other relevant academic sources. The combination of primary and secondary information will provide both an empirical and policy-oriented basis for the study.

Study Area and Population

The study is confined to Dehradun district of Uttarakhand. The population comprises employees working in selected public-sector and private-sector banks operating within the district. Employees engaged in customer service, deposits, credit, operations, relationship management and other banking functions may be included because their roles can involve interaction with financial products and customers.

Dehradun has been selected because of its expanding financial and service-sector activities and the growing relevance of environmentally responsible development in the region. The district provides an appropriate setting for examining how national green-finance initiatives are understood at the operational banking level.

Sampling and Sample Size

A suitable sample of bank employees will be selected using a combination of purposive and convenience sampling, depending on accessibility and institutional permission. Efforts will be made to include employees from both public-sector and private-sector banks so that meaningful comparisons can be undertaken.

For an empirical study, a sample of approximately **150–200 employees** would provide a practical basis for descriptive and comparative analysis. The final sample size will depend on the number of completed

and usable questionnaires received from participating employees.

Employees will be selected from different designations and experience groups to avoid concentrating the study on a single category of banking staff. Participation will be voluntary, and respondents will be informed about the academic purpose of the study.

Data Collection Instrument

A structured questionnaire will be used as the principal instrument. The questionnaire will contain questions relating to respondents' professional characteristics, general awareness of green finance, knowledge of green financial products and understanding of sustainable banking practices, training exposure and perceived implementation barriers.

Most awareness and understanding statements will be measured using a five-point Likert scale ranging from **1 = strongly disagree** to **5 = strongly agree**. Objective knowledge questions may also be included to distinguish actual understanding from respondents' self-perceived awareness.

The questionnaire will cover areas such as awareness of green deposits, renewable-energy financing, green bonds, environmental risk assessment, sustainable lending, green washing and relevant RBI initiatives. Questions concerning training will examine whether employees have attended formal programs, received internal communication or learned about green finance through self-study and professional sources.

Before final administration, the questionnaire should be reviewed for clarity and relevance. A small pilot test may be conducted among a limited number of employees to identify ambiguous questions and improve the reliability of the instrument.

11. Variables of the Study

The principal dependent variables are **green finance awareness** and **understanding of sustainable banking**. Awareness represents familiarity with green-finance concepts, products and regulatory initiatives. Understanding represents the ability to recognize their practical meaning, eligibility, application and relevance to banking activities.

Independent variables include educational qualification, age group, work experience, designation, type of bank, functional area and exposure to green-finance training. Training exposure is particularly important because sustainable finance is a developing area and employees may acquire knowledge through formal institutional programs.

The study will also examine perceived barriers such as insufficient training, limited customer demand, lack of detailed information, uncertainty regarding eligibility conditions, inadequate institutional communication and limited availability of green products.

12. Data Analysis

The collected data will first be examined for completeness and consistency. Descriptive statistics such as frequency, percentage, mean and standard deviation will be used to summarize respondents' characteristics and awareness levels.

An awareness score can be developed by combining responses to relevant questionnaire statements. Similarly, an understanding score can be calculated from items assessing knowledge of green deposits, renewable-energy finance, sustainable lending, environmental risk and related provisions.

For comparative analysis, appropriate statistical tests such as the independent-samples **t-test** or **ANOVA** may be applied depending on the number and nature of comparison groups. Where categorical variables are examined, the **chi-square test** may be used. Correlation analysis may be applied to determine the relationship between awareness and understanding.

Where the data satisfy the required assumptions, regression analysis may also be used to examine whether factors such as training exposure, educational qualification, experience and institutional type significantly explain differences in employees' understanding of sustainable banking.

The level of statistical significance will generally be considered at **5 per cent ($p < 0.05$)**. The analysis will focus not merely on statistical significance but also on the practical interpretation of the findings.

13. Reliability and Validity

Reliability refers to the consistency of the measurement instrument. Internal consistency of the

Likert-scale items may be examined using **Cronbach's alpha**. A satisfactory reliability coefficient would indicate that the items used to measure awareness or understanding is sufficiently consistent.

Content validity will be strengthened by developing questionnaire items from the study objectives, established literature and relevant RBI and Government of India frameworks. The questionnaire may also be reviewed by academic or banking experts before final data collection.

Construct validity will be considered by grouping questions according to the major dimensions of the study. Items concerning awareness, understanding, training and sustainable banking practices should represent clearly defined constructs rather than unrelated questions.

14. Proposed Empirical Framework

The study assumes that employees' understanding of sustainable banking is influenced by their general awareness of green finance and by their professional exposure. Training is expected to strengthen this relationship.

The proposed relationship is:

Employee Characteristics + Training Exposure → Green Finance Awareness → Green Finance Understanding → Sustainable Banking Readiness

Institutional communication and access to information are considered supporting factors. The framework does not assume that awareness alone guarantees implementation. Organizational policies, availability of green products, customer demand and regulatory clarity can also influence actual banking practices.

15. Expected Analysis of Employee Awareness

The first stage of empirical analysis will determine how familiar respondents are with basic green-finance concepts. Respondents may be asked whether they have heard of green finance, green banking, green deposits, green bonds, renewable-energy finance and environmental risk assessment.

The analysis will distinguish between general awareness and detailed knowledge. For example, an employee may have heard of green deposits but may

not know that their proceeds are subject to specified green-use requirements. Such differences are important because superficial awareness may not be sufficient for effective customer guidance.

The study will also examine sources of information. Possible sources include internal bank training, circulars and official communications, professional courses, newspapers and business media, academic sources, seminars and online resources. Identifying the dominant sources can help banks determine whether formal training is adequately reaching employees.

Training exposure will receive particular attention. Employees who have participated in green-finance or sustainability-related training can be compared with those who have not. If trained employees demonstrate higher understanding, the result would provide support for strengthening structured training programs.

16. Understanding of Green Finance Incentives

Understanding will be assessed through questions concerning the practical operation of green financial mechanisms. Employees may be asked about the purpose of green deposits, eligible areas of green financing, renewable-energy lending, sustainable investment instruments and environmental considerations in credit decisions.

The study will also assess whether employees understand the difference between a conventional financial product and a product specifically classified or structured as green. This distinction is important because the growing popularity of environmental terminology may create confusion among customers and employees.

Employees' knowledge of green washing will also be considered. Correct identification of environmental claims is important for responsible product communication and institutional credibility. The RBI's green-deposit framework incorporates safeguards intended to improve transparency and address green washing concerns.

17. Sustainable Banking Practices

Sustainable banking will be assessed beyond specific financial products. Employees may be asked about environmentally responsible lending, consideration of environmental risks during credit assessment, energy-

efficient branch operations, reduction of paper use, digital banking and responsible investment.

The study will examine whether employees perceive sustainability as an additional banking activity or as part of normal banking responsibility. A stronger understanding would be reflected in recognition that sustainability can be integrated into lending, risk management, investment and everyday branch operations.

This dimension is important because sustainable banking is broader than green product promotion. A bank may offer a green loan while continuing to treat environmental considerations as unrelated to conventional credit decisions. A comprehensive approach requires sustainability to be incorporated into institutional decision-making.

18. Factors Affecting Employee Understanding

Employee understanding may vary because of differences in educational background, professional experience, job responsibilities and exposure to institutional information. Employees working in credit and investment functions may have greater exposure to financial-product details than employees whose responsibilities are concentrated in routine customer services. However, this cannot be assumed without empirical testing.

Training is expected to be one of the most important factors. Green finance involves terminology, regulations and financial mechanisms that may not be covered adequately in conventional banking training. Regular updates can therefore help employees remain familiar with changes in regulatory and institutional policies.

Institutional communication is another important factor. Clear circulars, internal guidelines, workshops and practical examples can make green-finance concepts easier to apply. Communication should ideally explain not only what a green product is but also how employees should identify eligible customers, process relevant applications and communicate product conditions.

Customer demand may also affect employees' exposure to green finance. Where customers rarely ask about sustainable financial products, employees may have fewer opportunities to apply their knowledge. This creates a possible cycle in which

limited customer awareness and limited employee interaction reduce the visibility of green products.

19. Barriers to Sustainable Banking

Several barriers may restrict the effective implementation of green finance at branch level. These may include inadequate employee training, limited awareness among customers, uncertainty regarding eligibility criteria, insufficient institutional communication and limited availability of suitable green products.

Another possible barrier is the perception that sustainable finance is primarily an environmental issue rather than a banking issue. If employees do not recognize the relationship between environmental risks and financial risk, sustainability may receive limited attention in conventional banking decisions.

Operational workload can also affect implementation. Branch employees frequently manage multiple responsibilities, and new sustainability-related requirements may be difficult to incorporate without clear procedures and adequate training. Therefore, successful implementation requires practical guidance rather than only general awareness campaigns.

The study will assess the relative importance of these barriers from the perspective of employees. This can help identify whether the primary requirement is additional training, better communication, improved products or stronger institutional support.

20. Ethical Considerations

Participation in the study will be voluntary. Respondents will be informed about the academic purpose of the research, and personal information that is not necessary for analysis will not be collected. Responses will be treated confidentially and reported in aggregate form.

No employee will be required to disclose confidential banking information, customer information or institutional records. The study will focus exclusively on employees' perceptions, awareness and knowledge relating to green finance and sustainable banking.

The researcher will maintain academic integrity throughout data collection, analysis and reporting. Results will be presented according to the evidence

obtained from respondents, and fabricated or deliberately altered responses will not be used.

21. Limitations

The study is limited to Dehradun district and therefore its findings may not represent all bank employees in Uttarakhand or India. The use of a non-probability component in sampling may also limit generalization.

The study relies partly on self-reported responses. Employees may overestimate or underestimate their knowledge, particularly when responding to questions about professional awareness. Including objective knowledge questions can reduce this limitation.

The rapidly changing nature of green-finance regulations is another limitation. New RBI directions, government policies and institutional products may emerge after the completion of the study. The findings should therefore be interpreted within the regulatory context prevailing during the period of data collection.

Despite these limitations, the study can provide useful evidence about employee-level awareness and the practical preparedness of banking personnel for sustainable finance in Dehradun district.

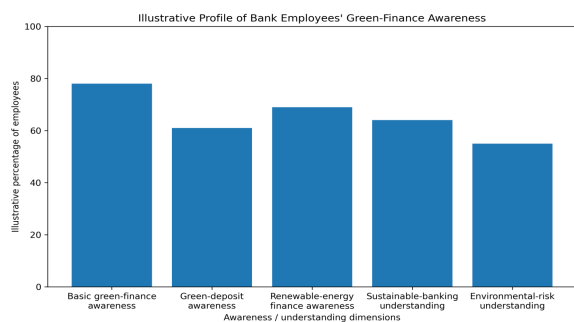
22. Data Analysis and Discussion

The empirical analysis of the study should begin with a profile of the participating bank employees. Variables such as age, educational qualification, designation, work experience, type of bank and exposure to green-finance training can be presented through frequencies and percentages. This profile is useful because awareness of emerging banking practices may differ according to professional experience and responsibilities.

The next stage should measure employees' awareness of green finance. Basic awareness can be accessed through familiarity with terms such as green finance, green banking, green deposits, renewable-energy finance and green bonds. The analysis should then move from simple familiarity to practical understanding. This distinction is important because knowing the terminology does not necessarily mean that an employee can explain the product or apply the relevant provisions.

A further dimension concerns awareness of green-finance incentives. Employees should be examined on their understanding of renewable-energy lending, priority-sector provisions, green deposits, sustainable investment instruments and environmental considerations in lending. Employees who understand these mechanisms are potentially better positioned to identify appropriate financing opportunities and communicate them to customers.

Figure 1. Illustrative Profile of Green-Finance Awareness among Bank Employees



Source: Illustrative researcher-generated presentation based on hypothetical values. The values must be replaced by actual survey results before empirical submission.

The illustrative pattern indicates that basic awareness is likely to be higher than detailed knowledge of environmental-risk management. This would be understandable because terms such as green finance and sustainable banking have become increasingly visible in banking and public policy discussions, whereas detailed knowledge of environmental-risk assessment and green-finance classification requires specialized training.

The expected relationship between awareness and understanding is also important. Employees who have received formal training are expected to demonstrate stronger knowledge of green deposits, renewable-energy financing and sustainable banking than employees without such exposure. This relationship should be tested statistically rather than assumed.

The analysis should further compare public-sector and private-sector employees. Differences may arise because banks differ in product portfolios, internal training programs, organizational priorities and exposure to sustainable-finance initiatives. However, the study should interpret such differences only when supported by statistical evidence.

Work experience may have a mixed effect. Experienced employees may possess stronger knowledge of conventional banking procedures and customer requirements, while relatively newer employees may have greater exposure to recent concepts such as ESG, climate finance and sustainable development through contemporary education and training. Therefore, the relationship between experience and green-finance understanding should be examined empirically.

23. Relationship between Training and Green-Finance Understanding

Training is expected to be one of the most important factors influencing employee understanding. Green finance requires knowledge that may not be adequately covered in traditional banking procedures. Employees need to understand both the financial and environmental dimensions of sustainable products.

A bank may issue internal circulars regarding green deposits or renewable-energy lending, but circular-based communication may not always provide sufficient practical understanding. Workshops, case studies and practical training can help employees understand how green-finance provisions apply to actual customer situations.

Training should therefore cover more than definitions. Employees should be introduced to eligible activities, documentation requirements, environmental criteria, risk considerations, product communication and common misconceptions. Training should also be updated whenever regulatory provisions or institutional products change.

If the empirical results show a significant relationship between training and understanding, banks would have a strong basis for increasing structured training programs. If the relationship is weak, it may indicate that existing training is too general or that employees need more practical exposure.

24. Sustainable Banking Practices

Sustainable banking should not be restricted to green loans or deposits. It involves incorporating environmental considerations into broader banking decisions. Employees may perceive sustainable banking through activities such as renewable-energy finance, digital banking, reduction of paper consumption, energy-efficient branches, responsible investment and environmental-risk assessment.

At the operational level, digital banking can indirectly support sustainability by reducing paper use and physical transactions. However, digitalization alone should not be treated as equivalent to green finance. Sustainable banking requires environmental considerations to be integrated into financial decision-making as well.

Environmental-risk assessment is another important area. Lending to activities exposed to environmental or climate-related risks may affect the financial position of borrowers and consequently the quality of bank assets. Awareness of such risks can therefore contribute to responsible credit decisions.

Employees should also understand the difference between a genuinely sustainable financial activity and a product that uses environmental terminology primarily for marketing. Accurate communication can strengthen customer confidence and reduce the risk of green washing.

25. Major Findings Expected from the Study

Based on the proposed research framework, the study is expected to generate findings in five major areas.

First, it will establish the overall level of employee awareness of green finance in Dehradun district. This will provide a baseline for understanding how familiar banking personnel are with the emerging sustainable-finance environment.

Second, the study will identify the difference between general awareness and detailed understanding. Employees may show reasonable familiarity with green finance while having lower knowledge of specific regulatory requirements and environmental-risk assessment.

Third, the study will examine the role of training. A positive association between training exposure and understanding would indicate the importance of continuous professional development.

Fourth, the research will identify institutional and operational barriers. These may include limited customer awareness, insufficient training, inadequate internal communication and uncertainty about green-finance procedures.

Finally, the study will provide evidence concerning the preparedness of bank employees to support sustainable banking. The results can help determine

whether employee-level capacity is keeping pace with the development of green-finance policies.

26. Recommendations

Banks should introduce regular training programs covering green finance, green deposits, renewable-energy finance, sustainable lending and environmental risk. Training should be practical and linked with actual banking situations rather than being limited to theoretical definitions.

Internal communication should also be strengthened. Banks can provide concise operational guidelines explaining eligibility conditions, documentation, customer identification and relevant regulatory provisions. Easy access to updated information can reduce uncertainty among employees.

Green-finance awareness should be incorporated into routine customer-service activities. Employees should be encouraged to identify customers whose financial requirements may involve renewable energy, energy efficiency, clean transportation or other eligible activities.

Banks should also strengthen customer awareness. Employees can serve as an important channel for explaining green financial products, but customer education through websites, brochures, seminars and digital platforms can complement branch-level communication.

Institutional monitoring should be improved to ensure that green-finance claims correspond with actual eligibility and allocation requirements. This can help reduce the possibility of green washing and strengthen public confidence.

Finally, sustainability should be incorporated into broader banking strategy rather than being treated as a separate specialized activity. Credit appraisal, risk management, investment decisions, employee training and branch operations can all incorporate appropriate sustainability considerations.

27. Conclusion

Green finance is becoming an increasingly important part of India's financial system. The development of green deposits, renewable-energy financing, green securities and climate-finance frameworks provides banks with opportunities to contribute to environmentally responsible development. However,

regulatory frameworks and financial products alone cannot guarantee successful implementation.

Bank employees are an important operational link between institutional policies and customers. Their awareness determines whether they can recognize sustainable-finance opportunities, explain products accurately and support customers seeking environmentally beneficial financing. Their deeper understanding is equally important because sustainable banking requires knowledge of eligibility conditions, environmental considerations, risk and regulatory requirements.

The proposed study of Dehradun district focuses on this employee-level dimension. It distinguishes basic awareness from practical understanding and examines the possible influence of training, professional characteristics and institutional communication. This approach can provide a more realistic assessment of banking-sector preparedness for sustainable finance.

The study also highlights the need for continuous capacity building. As India's green-finance framework develops, banking employees will require regular updates and practical training. Stronger employee knowledge can improve product communication, customer awareness and responsible lending practices.

For Dehradun district, strengthening sustainable banking can support environmentally responsible economic activity while improving the capacity of local financial institutions to participate in India's broader transition towards sustainable development. The long-term effectiveness of green finance will depend not only on the availability of financial mechanisms but also on the ability of banking institutions and their employees to understand and implement them responsibly.

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