Journal of Advances in Developmental Research (IJAIDR)
E-ISSN: 0976-4844 ● Website: www.ijaidr.com ● Email: editor@ijaidr.com

An Empirical Assessment of Green Finance Perceptions among SME Entrepreneurs and Employees in Rajasthan

Dr. Aditya Kumar Sharma[1], Dr. Karuna Sharma[2]

[1]Assistant Professor, Business Administration, Government Commerce College, Sikar
[2]Assistant Professor, Business Administration, SK Govt. Girls College, Sikar

Abstract:
Green finance directs funds towards activities that protect the environment while supporting economic growth. This study examined how SME entrepreneurs and employees in Rajasthan perceive the importance of green finance. A quantitative, descriptive and cross sectional design was used. Data were collected from 174 respondents, comprising 42 SME entrepreneurs and 132 SME employees. The scale showed internal consistency, with a Cronbach's alpha of 0.835. Descriptive statistics and an independent samples t test were used for analysis. The findings indicated favourable views of green finance, particularly regarding competitiveness, sustainable investment and long term financial viability. SME entrepreneurs attached significantly greater importance to green finance than employees. The study highlights the need for simpler communication, practical training and employee involvement so that its environmental and business value is understood throughout the SME sector in Rajasthan.

Keywords: Green Finance; Small and Medium Enterprises; Entrepreneurial Perception; Employee Perception; Sustainable Development

UNDERSTANDING THE IMPORTANCE OF GREEN FINANCE IN THE SME SECTOR

Small and medium enterprises play an important role in employment, production and local economic development. At the same time, their activities may consume energy, generate waste and create environmental pressure. These businesses therefore need financial support that allows them to grow while adopting cleaner and more responsible practices. Green finance serves this purpose by directing funds towards projects that improve environmental performance and support sustainable development.

For SMEs, green finance may help finance energy efficient equipment, cleaner production methods, waste reduction, renewable energy and compliance with environmental requirements. These investments can also improve operating efficiency, strengthen business reputation and prepare enterprises for changing market expectations. However, the value of green finance depends not only on the availability of funds but also on how it is understood by the people working within an enterprise.

Entrepreneurs generally make investment and financing decisions, while employees are more closely involved in everyday operations. Their roles may therefore shape how they view the importance of green finance. Entrepreneurs may focus on financial viability, competitiveness and access to sustainable investment.

Employees may connect it more closely with working practices, resource use and environmental responsibility. If their understanding differs, the adoption of green initiatives may not receive equal support throughout the organisation.
In Rajasthan, SMEs operate across varied sectors and contribute substantially to the state economy. Yet there remains a need to understand whether entrepreneurs and employees attach similar importance to green finance and its possible contribution to sustainable business development. Examining their perceptions can help financial institutions, SME associations and policymakers communicate green finance more effectively. The present study therefore examines the perceptions of SME entrepreneurs and employees in Rajasthan regarding the importance of green finance.

REVIEW OF LITERATURE

(Hasbi, 2025) examined how green finance and renewable energy contribute to the sustainability of SMEs through environmental management practices. Data were collected from 200 SME respondents in Indonesia using a structured questionnaire. The results showed that green finance and renewable energy positively supported business sustainability, while formal environmental policies, resource efficiency and pollution control strengthened these relationships. The economic dimension of green finance produced the strongest effect, indicating that SMEs attach considerable importance to cost savings, profitability and returns from environmental investments. The study supports the view that green finance can generate both environmental and commercial value for SMEs.
(Zheng et al., 2025) investigated whether sustainable lending to green SMEs affected the performance and financial stability of banks in the Eurozone. The researchers analysed bank level data from 2013 to 2023 through fixed effects panel regression. Greater lending exposure to green SMEs was associated with improved net interest margins and stronger financial stability. Green lending standards supported profitability, although certification alone did not directly improve bank solvency. The findings demonstrate that financing environmentally responsible SMEs need not conflict with the commercial interests of financial institutions. This evidence reinforces the importance of green finance for SMEs by showing that it can benefit both borrowing enterprises and lending institutions.
(Arcuri et al., 2024) explored whether gender representation influenced the financing of SMEs operating in green industries. The researchers conducted a panel analysis covering 184,425 observations, including 5,855 observations relating to green enterprises in Italy. The proportion of women among directors and managers was examined in relation to bank borrowing and credit costs. The analysis revealed that financing patterns in green SMEs differed according to women's participation in management, although greater female representation did not necessarily reduce the risk perceived by lenders. The study shows that access to green finance may be shaped by managerial characteristics and lender perceptions, in addition to environmental commitment.
(Arcuri & Pisani, 2024) examined the financial resilience and external credit patterns of green and non-green SMEs in Italy during the COVID-19 period. Their analysis covered 215,564 observations from 2017 to 2020, of which 6,844 related to green enterprises. Green SMEs did not obtain a greater proportion of external finance than other SMEs, but they relied more heavily on trade credit. This pattern remained visible during the economic disruption caused by the pandemic. The findings indicate that environmental orientation does not automatically remove financing difficulties. They are relevant to the present study because they demonstrate

why entrepreneurs and employees may recognise the importance of green finance differently in practical business settings.

(Rahman et al., 2024) investigated the contribution of green finance, green logistics and corporate social responsibility to net zero emission objectives in the pharmaceutical and chemical industries of Bangladesh. A cross-sectional questionnaire survey was completed by 279 financial and managerial respondents, and the proposed relationships were tested through partial least squares structural equation modelling. Green financing positively supported corporate social responsibility activities and progress towards lower emissions. The findings also showed that sustainable financial decisions require the involvement of managers and officers across different organisational functions. This has direct relevance to the present research, which compares the perceptions of SME entrepreneurs and employees regarding the importance of green finance.

(Chen et al., 2023) studied green finance awareness and sustainable competitiveness among SMEs in China, Malaysia and Singapore. Self-administered online questionnaires were completed by 738 senior managers in China, 314 in Malaysia and 210 in Singapore. The responses were analysed using SPSS and partial least squares structural equation modelling. The study connected green finance awareness with SME competitiveness, supply chain considerations and broader environmental objectives. Its cross-country approach highlighted the organisational importance of understanding green finance rather than treating it only as a specialised financial product. The work is particularly relevant because it positions awareness and perception as important elements in the ability of SMEs to recognise the value of green finance.

(Asad et al., 2023) analysed whether green entrepreneurial orientation improved the financial and environmental performance of SMEs. Data were collected from 384 Pakistani SMEs involved in green practices through simple random sampling and examined using structural equation modelling. Green entrepreneurial orientation was positively associated with both financial and environmental performance. Green technology dynamism and the transfer and integration of knowledge strengthened these relationships. The findings indicate that environmental responsibility can contribute to business performance when it is supported by suitable knowledge and technology. The study therefore explains why SME stakeholders may view green finance as important for competitiveness, cleaner production and long term organisational sustainability.

(Aslam et al., 2023) examined the role of government support in financial literacy, access to finance, green value creation and SME sustainability. The researchers collected 320 responses from SMEs in Lahore, Pakistan, using convenience sampling and tested the proposed model through AMOS. Government support contributed to financial literacy, access to finance and green value creation, which were important for SME sustainability. The research showed that financial capability and environmental practices need institutional support to produce meaningful business benefits. It is relevant to the present study because perceptions of green finance may depend on how clearly SMEs understand available financial options and their connection with sustainable business performance.

(Hou & Fang, 2023) examined the relationship among green finance, SMEs, financial literacy and green economic recovery in China. The study applied an empirical approach using data envelopment analysis and information covering the period from 2000 to 2020. Green finance and SME development contributed to the country’s green economic recovery, while financial literacy was positively connected with improved outcomes. Limited financial understanding was associated with weaker progress. The findings suggest that the effectiveness of green finance depends partly on whether business stakeholders understand its purpose and available mechanisms. This provides a useful basis for examining how entrepreneurs and employees perceive the importance of green finance.

(Dzomonda, 2022) investigated whether environmental sustainability commitment helped SMEs gain access to external finance and whether financial performance and corporate governance influenced this relationship. Self-administered questionnaires were completed by 600 SME owners and managers from three South African provinces. The moderated mediation model was assessed through partial least squares structural equation modelling. Environmental commitment was positively related to access to finance, both directly and through financial performance, while effective corporate governance strengthened the relationship. The findings indicate that responsible environmental practices can improve how SMEs are viewed by banks, investors and government agencies. This supports the wider importance of green finance for sustainable SME development.

Research Gap

The reviewed studies demonstrate that green finance can support SME sustainability, environmental performance, competitiveness, innovation, access to finance and lower carbon development. Most of the available evidence, however, comes from China, Europe, Indonesia, Pakistan, Bangladesh and South Africa. Existing research has largely focused on enterprise performance, lending behaviour, environmental outcomes or the opinions of owners and senior managers. Limited attention has been given to whether entrepreneurs and employees within the SME sector attach the same level of importance to green finance. No study identified in the reviewed literature directly compares these two respondent groups in Rajasthan. The present study addresses this gap by examining whether SME entrepreneurs and employees differ in their perceptions regarding the importance of green finance.

RESEARCH METHODOLOGY

Research Objective

To examine the perceptions of SME entrepreneurs and employees in Rajasthan regarding green finance.

Research Design

The study adopted a descriptive, cross-sectional and empirical research design to examine perceptions of green finance among SME entrepreneurs and employees in Rajasthan. The descriptive component enabled the response patterns to be summarised, while the empirical component supported a statistical comparison between the two respondent groups. As the perceptions were examined at a single point in time, the cross-sectional design was considered appropriate.

Research Approach

A quantitative research approach was followed because the study measured respondents' perceptions through numerical Likert-scale responses. This approach supported the calculation of item-level and construct-level mean scores and enabled the difference between SME entrepreneurs and employees to be examined statistically.

Population and Sample

The target population comprised SME entrepreneurs and employees in Rajasthan. The sample included 174 respondents, of whom 42 were SME entrepreneurs and 132 were SME employees. Purposive sampling was employed to include respondents belonging to the two categories relevant to the research objective. The sample provided observations from both groups and was adequate for the proposed descriptive analysis and independent-samples comparison.

Research Variables

Respondent category was treated as the independent and grouping variable, comprising SME entrepreneurs and SME employees. Perception regarding the importance of green finance was the dependent variable. It represented the extent to which respondents considered green finance important for environmental sustainability, resource efficiency, cleaner production, regulatory compliance, business competitiveness and long-term financial viability.

The construct-level mean score was calculated separately for each respondent. The scores obtained across the ten statements were added together and divided by ten. The resulting mean represented the respondent's overall perception regarding the importance of green finance. A higher mean score indicated a stronger perception of its importance. This construct-level mean score was subsequently used for descriptive analysis and the comparison between SME entrepreneurs and employees.

Instrument Development and Measurement

A structured questionnaire was used to measure the Importance of Green Finance construct. The instrument contained ten statements addressing sustainable development, environmental performance, cleaner technologies, carbon reduction, financial viability, resource efficiency, competitiveness, environmental compliance, sustainable investment and transition towards a low-carbon economy.

Data Collection Procedure

The structured questionnaire served as the principal instrument for obtaining responses from SME entrepreneurs and employees in Rajasthan. The respondent categories were identified according to the purpose of the study, and the completed responses were organised for item-level, construct-level and group-wise analysis.

Reliability of the Instrument

Cronbach's alpha was used to assess the internal consistency of the ten statements measuring the Importance of Green Finance construct.

Table 1.1: Cronbach's alpha

Construct	Number of statements	Cronbach's alpha
Importance of Green Finance	10	0.835

The alpha coefficient of 0.835 exceeded the generally accepted threshold of 0.70. The result indicated that the ten statements possessed good internal consistency and were sufficiently reliable for the proposed statistical analysis.

LIKERT SCALE ANALYSIS

Table 1.2: Likert Scale Statement Analysis

S. No.	Likert statement	SD	D	N	A	SA	$\overline{X}$	σ
1	Green finance is essential for promoting sustainable development in the SME sector.	11 6.32%	31 17.82%	42 24.14%	47 27.01%	43 24.71%	3.46	1.22

S. No.	Likert statement	SD	D	N	A	SA	$\overline{X}$	σ
2	Green finance can improve the environmental performance of SMEs.	18 10.34%	28 16.09%	44 25.29%	51 29.31%	33 18.97%	3.30	1.24
3	Green finance supports SMEs in adopting cleaner technologies and production processes.	11 6.32%	23 13.22%	57 32.76%	53 30.46%	30 17.24%	3.39	1.11
4	Green finance is important for reducing carbon emissions arising from SME operations.	20 11.49%	36 20.69%	42 24.14%	49 28.16%	27 15.52%	3.16	1.25
5	Green finance can strengthen the long-term financial viability of SMEs.	13 7.47%	24 13.79%	48 27.59%	54 31.03%	35 20.11%	3.43	1.17
6	Green finance encourages SMEs to use energy and other resources more efficiently.	16 9.20%	32 18.39%	44 25.29%	52 29.89%	30 17.24%	3.28	1.21
7	Green finance can improve the competitiveness of SMEs in domestic and international markets.	7 4.02%	29 16.67%	39 22.41%	61 35.06%	38 21.84%	3.54	1.13
8	Green finance helps SMEs comply with emerging environmental standards and regulations.	21 12.07%	27 15.52%	50 28.74%	48 27.59%	28 16.09%	3.20	1.24
9	Green finance expands opportunities for SMEs to obtain funding for sustainable investments.	11 6.32%	30 17.24%	40 22.99%	53 30.46%	40 22.99%	3.47	1.20
10	Green finance contributes to the transition of SMEs towards a low-carbon economy.	11 6.32%	32 18.39%	41 23.56%	53 30.46%	37 21.26%	3.42	1.19

The item means ranged from 3.16 to 3.54, reflecting moderately favourable but varied perceptions of green finance. Respondents expressed their agreement regarding its contribution to SME competitiveness, sustainable investment opportunities and sustainable development. Comparatively lower means for carbon reduction, environmental compliance and resource efficiency indicate areas where the perceived importance of green finance was less firmly established.

HYPOTHESIS TESTING

H_{01}: There is no significant difference in the perception of SME entrepreneurs and employees regarding the importance of green finance.

For testing H_{01}, respondent category was used as the independent grouping variable, comprising SME entrepreneurs and SME employees. The construct mean score for the Importance of Green Finance was used as the dependent variable. An independent-samples t-test was applied to determine whether the mean perception regarding the importance of green finance differed significantly between SME entrepreneurs and employees.

Table 1.3: Descriptive Statistics

		n	Mean	Std. Deviation	Std. Error Mean
Construct_Mean	SME Entrepreneur	42	3.79	0.96	0.15
	SME Employee	132	3.23	0.91	0.08

SME entrepreneurs reported a higher mean perception score (M = 3.79, SD = 0.96) than SME employees (M = 3.23, SD = 0.91).

Table 1.4: Equality of variances

Test	F	df1	df2	p
Levene's Test (Mean)	0.04	1	172	.835

Levene's test was not significant, $F(1, 172) = 0.04$, $p = .835$, indicating that the assumption of equal variances was satisfied. The equal-variances result was therefore interpreted.

Table 1.5: t-Test for independent samples

		t	df	p
Construct_Mean	Equal variances	3.42	172.00	.001
	Unequal variances	3.33	66.19	.001

The independent-samples t-test revealed a statistically significant difference between the two groups, $t(172) = 3.42$, $p = .001$. The direction of the mean scores showed that SME entrepreneurs attached comparatively greater importance to green finance than SME employees.

H_{01} was tested using an independent-samples t-test. As the obtained p-value of .001 was below the 5% significance level, the null hypothesis is rejected. The researcher concludes that there is a significant difference between SME entrepreneurs and employees in their perception regarding the importance of green finance. SME entrepreneurs perceived green finance as more important than SME employees. This suggests that the two respondent groups differ in the level of importance they attach to green finance within the SME context

SUGGESTIONS BASED ON FINDINGS

1. Banks and financial institutions should explain green finance schemes in simple language so that SME entrepreneurs and employees can clearly understand their purpose, benefits, eligibility requirements and application procedures.

2. SME associations should organise awareness programmes that show how green finance can support sustainable development, improve business competitiveness and strengthen the long term financial position of enterprises.
3. SME owners should involve employees in discussions about environmental investment and explain how such decisions can benefit the organisation. This may help reduce the difference observed between the perceptions of entrepreneurs and employees.
4. Practical training should be provided on how green finance can help SMEs adopt cleaner technologies, reduce carbon emissions and use energy and other resources more efficiently.
5. Banks, government agencies and SME support organisations should share practical examples of enterprises that have used green finance successfully. Such examples may help respondents understand its actual business and environmental value.
6. Financial institutions should make green financing procedures easier and provide proper guidance during the application process, particularly for SMEs that have limited knowledge of sustainable finance.
7. SME management should explain emerging environmental standards to employees and show how green finance can help the organisation meet these requirements without placing unnecessary pressure on its regular operations.
8. SMEs should periodically assess the understanding of entrepreneurs and employees regarding green finance. The findings of these assessments can be used to identify areas where further information, guidance or training is required.

REFERENCES:

1. Arcuri, M. C., Di Tommaso, C., & Pisani, R. (2024). Does gender matter in financing SMEs in green industry? *Research in International Business and Finance, 69*, 102222. https://doi.org/10.1016/j.ribaf.2024.102222
2. Arcuri, M. C., & Pisani, R. (2024). Access to external credit during COVID-19: Evidence from green SMEs in Italy. *Review of Managerial Science, 18*(7), 1–30. https://doi.org/10.1007/s11846-023-00654-9
3. Asad, M., Majali, T., & Aledeinat, M. (2023). Green entrepreneurial orientation for enhancing SMEs financial and environmental performance: Synergetic moderation of green technology dynamism and knowledge transfer and integration. *Cogent Business & Management, 10*(3), 2278842. https://doi.org/10.1080/23311975.2023.2278842
4. Aslam, R., Rehman, S., & Nasir, A. (2023). Investigating the relationship between government support and SMEs' sustainability through financial and green lenses. *Journal of Business & Industrial Marketing, 38*(11), 2379–2389. https://doi.org/10.1108/JBIM-05-2022-0191
5. Chen, C., Chong, K. M., Tan, T. H., & Wang, H. (2023). Mechanism of green finance awareness on sustainable competitiveness of SMEs. *Environment-Behaviour Proceedings Journal, 8*(24), 29–47. https://doi.org/10.21834/ebpj.v8i24.4635
6. Dzomonda, O. (2022). Environmental sustainability commitment and access to finance by small and medium enterprises: The role of financial performance and corporate governance. *Sustainability, 14*(14), 8863. https://doi.org/10.3390/su14148863

7. Hasbi, H. (2025). The impact of renewable energy and green finance on SMEs sustainability through environmental management practices. *Jurnal Ilmiah Manajemen Kesatuan, 13*(6), 5271–5284. https://doi.org/10.37641/jimkes.v13i6.4385
8. Hou, Y., & Fang, Z. (2023). Unleashing the mechanism between small and medium enterprises, and green financing in China: A pathway toward environmental sustainability and green economic recovery. *Environmental Science and Pollution Research, 30*(1), 1672–1685. https://doi.org/10.1007/s11356-022-21448-8
9. Rahman, M. M., Islam, M. F., Dyuti, T. I., & Hossain, M. E. (2024). Driving net zero emissions through green finance, green logistics, and corporate social responsibility: Findings from PLS-SEM approach. *Discover Sustainability, 5*(1), 439. https://doi.org/10.1007/s43621-024-00675-8
10. Zheng, L., Mirza, N., Umar, M., & Su, C. W. (2025). Sustainable lending to European SMEs: Implications for bank performance. *International Review of Economics & Finance, 102*, 104283. https://doi.org/10.1016/j.iref.2025.104283