



Awareness, Perception and Reality of Green Finance Among Common Investors

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Abstract: India's financial and fiscal ecosystem is undergoing rapid transformation, with green finance emerging as a crucial driver for funding sustainable development initiatives. Recognizing its importance, the government has introduced multiple schemes and projects to encourage the adoption of green financing practices. Against this backdrop, the present study explores the level of awareness, perception, and practical realities of green finance among common investors, who significantly influence the nation's economic growth. The enquiry is conducted using two structured questionnaires designed to capture investor knowledge, attitudes, and investment behaviors. By analyzing these perceptions, the study aims to enrich the discourse on sustainable finance adoption while highlighting strategies to strengthen financial literacy and foster greater participation in green investment practices among the general public.

Key Words: eco-friendly banking, Green finance, Investors.

1. INTRODUCTION

In recent years, the urgency to combat climate change and promote environmental sustainability has led to the emergence of green finance as a pivotal concept in the financial ecosystem. Green finance refers to financial investments that support sustainable development, environmental conservation, and the reduction of carbon emissions, typically through green bonds, sustainable mutual funds, and eco-friendly banking practices. As global economies pivot toward low-carbon and climate-resilient models, the role of individual investors becomes increasingly significant.

However, the effectiveness of green finance largely depends on the awareness and willingness of common investors to participate in environmentally responsible financial instruments. Despite the growing global momentum for sustainable finance, there exists a perceptible gap in understanding how much the average investor knows about green finance options and their implications. This research aims to explore the perception and awareness of green finance among common investors, and the extent to which sustainability considerations impact their financial behavior.

Individual investor awareness significantly influences participation in green financing initiatives by shaping perceptions of environmental benefits, financial incentives, and risk assessments. Empirical evidence indicates that enhanced awareness mediated through education, social media, and executive green consciousness can increase investor engagement in green projects. However, investor attention alone may paradoxically reduce environmental disclosure transparency unless accompanied by executive green awareness. Financial literacy inconsistencies and psychological biases further modulate investment decisions, underscoring the need for targeted awareness programs and regulatory frameworks to foster meaningful participation in green finance.

2. REVIEW OF LITERATURE

Ali et al. (2023) provide empirical survey data from 97 Pakistani farmers and investors engaged in biogas technology, utilizing PLS-SEM to demonstrate that awareness—particularly when combined with expert consultation, government incentives, and social media engagement—substantially increases investment propensity in green energy infrastructure.



The study highlights the pivotal role of awareness as a catalyst for overcoming barriers such as perceived financial risk and maintenance concerns. The sample size, while modest, is appropriate for structural equation modeling, but generalizability beyond the agricultural context and Pakistan's socio-economic milieu remains limited.

Chen et al. (2024) investigate investor attention and executive green awareness in 463 Chinese high-tech firms over 11 years, employing dynamic panel GMM to analyze environmental information disclosure. Contrary to expectations, higher investor attention correlates negatively with environmental disclosure, suggesting that investor focus may prioritize short-term financial returns over sustainability transparency. Crucially, executive green awareness moderates this effect, mitigating the negative correlation and promoting better disclosure practices. This nuanced finding reveals that individual investor awareness alone is insufficient; organizational leadership's environmental cognizance is a critical co-factor in green finance participation. The large sample size and longitudinal design provide robust Level III evidence, though sector-specific heterogeneity (e.g., IT services) limits universal applicability.

The retracted article by Ali et al. (2023) on biogas investment intentions post-COVID-19 is excluded from detailed consideration due to retraction, though its thematic overlap with [1] suggests similar conclusions about awareness and behavioral intention. This exclusion emphasizes the importance of scrutinizing study validity in evidence synthesis.

Qin et al. (2023) analyze 264 Chinese online loan platforms to examine how negative psychological perceptions influence platform liquidity, a proxy for investor confidence and participation. Using Baidu Search Index as a sentiment measure, they demonstrate that negative investor perceptions reduce liquidity and increase risk, particularly in lower-quality platforms. While not directly focused on green finance, this study illuminates the psychological dimension of investor awareness, suggesting that negative sentiment can deter participation in innovative financial products, including green financing. The large dataset and rigorous econometric approach provide Level III evidence, but the indirect relevance to green finance limits direct extrapolation.

Nguyen et al. (2024) employ a sophisticated fuzzy multi-criteria decision-making model to identify critical barriers to green bond issuance in Vietnam, with awareness-related barriers—such as lack of investor confidence in project quality—emerging as primary obstacles. This study underscores that investor awareness is not merely about knowledge but also trust and perceived credibility, which are essential for market development. The expert Delphi panel (n=16) and integrated modeling provide a high-level conceptual framework (Level V evidence) with practical policy implications for emerging green finance markets.

Ventre et al. (2024) explore the relationship between financial literacy inconsistencies and decision-making inconsistency in intertemporal choices, finding strong correlations between literacy dimensions and rational financial behavior. This behavioral finance insight is critical: investor awareness is multifactorial, encompassing knowledge, attitudes, and behaviors, which collectively influence green finance participation. The study's theoretical and empirical rigor (Level III-IV evidence) highlights that improving financial literacy alone may be insufficient without addressing psychological biases and temporal inconsistencies.

Pfitzer et al. (2025) identify investor alignment and customer awareness as key success factors in scaling digital health technologies, analogous to green finance where investor awareness and alignment with environmental goals drive participation. Though focused on health technologies, the findings reinforce the importance of tailored awareness strategies and strategic partnerships in fostering investor engagement, providing transferable insights.

3.OBJECTIVES OF THE STUDY

1. To evaluate the extent of investment made by common investors in financial instruments as an indicator of their awareness on the basis of their age and educational qualification.
2. To identify the sources of information individual investors, rely on for learning about green finance.
3. To assess the level of awareness among individual investors about green finance schemes

Hypothesis of the study

H01: There is no significant association between the current monthly investment in financial securities with respect to gender of the respondents

H02: There is no significant association between the current monthly investment in financial securities with respect to educational level of the respondents.



4. RESEARCH METHODOLOGY

The study undertook descriptive and exploratory research using Primary & Secondary research method to fulfil the research objectives. It was conducted by administering two structured questionnaires for collecting primary data. The survey questionnaires have been developed based on an extensive review of the literature. First questionnaire was prepared in a manner so that a awareness level of individual investors is been determined. Based on the responses collected from first set of questionnaire second questionnaire is sent to some selective respondents only. The population for this research study consists of 100 individual investors having minimum qualification of graduation level. The sample were selected by a non-probability convenience sampling method. This is appropriate for gathering data from huge number of respondents having knowledge about green financial products. And secondary data has been taken from several website, reference books, academic journals to gain insights about green finance schemes. The analysis was done through SPSS version 21 and excel using simple percentage method and chi square test was applied to check the hypothesis.

5. DATA ANALYSIS AND INTERPRETATION

This portion covers the brief demographic details of the respondents which include gender, educational background and income level of the respondents. Out of the total 100 participants, 48 percent were male while 52 percent were female. To create a fairly balanced representation between the two genders, with a slight predominance of female respondents. The close proportion suggests that both male and female perspectives are almost equally represented in the study, which helps in ensuring that the findings are not biased toward one gender. The educational background of the respondents includes 46 percent of the respondents hold a graduate degree, while 44 percent have attained postgraduate qualifications. Additionally, 10 percent of the respondents possess education above the postgraduate level. This distribution shows that the sample is highly educated, with 54 percent of respondents having completed postgraduate or higher studies. The income profile of the respondents includes that a significant proportion, 40 percent, earn less than ₹50,000 per month, making it the largest group. About 24 percent fall within the ₹50,000–₹80,000 income bracket, while 12 percent earn between ₹80,000 and ₹1,50,000. Additionally, 24 percent reported earning more than ₹1,50,000 per month.

First objective of the study is to evaluate the extent of investment made by common investors in financial instruments as an indicator of their awareness on the basis of their age and educational qualification. Below table 1 shows the frequency tables of responses collected from the respondents.

Table 1 Current monthly investment in financial securities					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 5000	64	64.0	64.0	64.0
	5000-10000	20	20.0	20.0	84.0
	10000-20000	16	16.0	16.0	100.0
	Total	100	100.0	100.0	

The data on respondents' monthly investments in financial securities reveals that a majority, 64 percent, invest less than ₹5,000 per month. About 20 percent of respondents allocate between ₹5,000 and ₹10,000 monthly, while 16 percent invest between ₹10,000 and ₹20,000. This shows that most respondents prefer to keep their investments relatively low, with only a smaller portion committing higher amounts. The pattern suggests cautious investment behaviour, possibly due to limited disposable income, risk aversion.

H01: There is no significant association between the current monthly investment in financial securities with respect to gender of the respondents.

**Table 1.1(a) Current monthly investment in financial securities * Gender of the Respondents Crosstabulation**

Count			Gender of the Respondents		
			Male	Female	Total
Current monthly investment in financial securities	less than 5000		24	40	64
	5000-10000		12	8	20
	10000-20000		12	4	16
Total			48	52	100

The cross-tabulation between gender and current monthly investment in financial securities shows clear differences in investment behaviour. Among male respondents, investments are more evenly distributed: 24 males invest less than ₹5,000, 12 invest between ₹5,000–₹10,000, and another 12 invest between ₹10,000–₹20,000 per month. In contrast, female respondents show a stronger concentration in the lowest category, with 40 out of 52 females (77%) investing less than ₹5,000 monthly. Only 8 females invest between ₹5,000–₹10,000, and 4 females invest between ₹10,000–₹20,000.

Table 1.1 (b) Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.654 ^a	2	.013
Likelihood Ratio	8.874	2	.012
Linear-by-Linear Association	8.487	1	.004
N of Valid Cases	100		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.68.

The Chi-Square test results indicate a significant association between gender and current monthly investment in financial securities. The Pearson Chi-Square value (8.654, $p = 0.013$) is less than 0.05, showing that investment patterns differ significantly by gender. Similarly, the Likelihood Ratio ($p = 0.012$) supports this finding, and the Linear-by-Linear Association ($p = 0.004$) further confirms a strong relationship. Since all expected counts are above 5, the test results are reliable. This suggests that gender plays a significant role in influencing the level of monthly investment in financial securities.

H02: There is no significant association between the current monthly investment in financial securities with respect to educational level of the respondents.

1.2 (a) Current monthly investment in financial securities * Education level of the Respondents Crosstabulation

			Education Level of the Respondents			Total
			Graduate	Post Graduate	Above PG	
Current investment securities	monthly in financial	less than 5000	30	27	7	64
		5000-10000	12	5	3	20
		10000-20000	4	12	0	16
Total			46	44	10	100

Above crosstabulation shows the relationship between the **education level of respondents** and their **current monthly investment in financial securities**. Out of 100 respondents, the largest group (64%) invests **less than ₹5,000 per month**, and this pattern is consistent across all education levels: 30 graduates, 27 postgraduates, and 7 respondents above post-graduate level fall into this category. A smaller proportion, 20%, invests between **₹5,000–10,000**, with graduates (12) making up the largest share, followed by 5 postgraduates and 3 above postgraduates. Meanwhile, 16% invest in the **₹10,000–20,000** range, where postgraduates dominate (12), compared to only 4 graduates and none above post-graduate level. Overall, the table indicates that despite higher education, most respondents across categories prefer to keep their monthly investments relatively low (under ₹5,000). However, postgraduates are more inclined than graduates or that above postgraduate level to invest in the **higher range (₹10,000–20,000)**, suggesting a possible link between postgraduate education and greater financial risk-taking or investment capacity.



1.2 (b) Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.736 ^a	4	.045
Likelihood Ratio	11.191	4	.024
Linear-by-Linear Association	.119	1	.730
N of Valid Cases	100		
a. 2 cells (22.2%) have expected count less than 5. The minimum expected count is 1.60.			

The Chi-Square test results indicate whether there is a **statistically significant association** between the respondents' education level and their current monthly investment in financial securities. The **Pearson Chi-Square value (9.736, $p = 0.045$)** shows significance at the 5% level, suggesting that education level and investment amount are **not independent**—in other words, the education of respondents influences their investment behavior. The **Likelihood Ratio ($p = 0.024$)** also supports this finding. However, the **Linear-by-Linear Association ($p = 0.730$)** is not significant, which means there is no clear linear trend between higher education levels and increasing investments. Additionally, the note about expected counts shows that **2 cells (22.2%) had expected counts below 5**, with a minimum of 1.60, indicating that the assumption of the Chi-Square test is slightly violated.

Second objective of the study is to identify the sources of information individual investors rely on for learning about green finance. For these four sources used by respondent on the basis of previous review is been identified and the responses collected from respondents is shown in the table 2.1

Table 2.1 Primary source of information for investing					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Financial Advisor	24	24.0	24.0	24.0
	Online Platform	40	40.0	40.0	64.0
	Social media	4	4.0	4.0	68.0
	Friends and Family	32	32.0	32.0	100.0
	Total	100	100.0	100.0	

The analysis of respondents' primary sources of investment information shows that online platforms are the most preferred, with 40 percent of respondents relying on them. Friends and family also play a significant role, accounting for 32 percent of responses. Financial advisors are consulted by 24 percent of respondents, while only a small proportion (4 percent) depend on social media for investment-related insights. This distribution highlights the increasing importance of digital platforms in influencing investment decisions, while also showing that traditional personal networks continue to be a strong source of information.

Table 2.2 Overall investment knowledge of the respondent					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very high	4	4.0	4.0	4.0
	high	4	4.0	4.0	8.0
	moderate	52	52.0	52.0	60.0
	low	32	32.0	32.0	92.0
	very low	8	8.0	8.0	100.0
	Total	100	100.0	100.0	

Table 2.2 shows overall investment knowledge of respondents shows that the majority (52%) have a moderate level of knowledge, while 32% report low knowledge. Only a small proportion demonstrate very high (4%) or high (4%) knowledge, and 8% have very low knowledge. Cumulatively, 92% of respondents rate their investment knowledge as moderate or below, indicating that most individuals lack strong expertise in financial investments.



Table 2.3 Awareness about green finance					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	24	24.0	24.0	24.0
	No	44	44.0	44.0	68.0
	Can't say	32	32.0	32.0	100.0
	Total	100	100.0	100.0	

Table 2.3 shows respondents' awareness of green finance it reveals relatively low levels of familiarity. Only 24 percent reported being aware of the concept, while 44 percent admitted to having no knowledge about it. Additionally, 32 percent were uncertain and responded with "can't say." This indicates that more than three-fourths of the respondents either lack awareness or have only limited understanding of green finance. The results highlight a significant gap in financial literacy regarding sustainable and environmentally conscious investment options, suggesting the need for greater awareness campaigns, educational initiatives, and policy-driven efforts to promote green finance among potential investors.

Table 2.4 Acquaintance about green schemes				
		Responses		
		N	Percent	Percent of Cases
Acquaintance about green schemes	Sovereign green bonds	40	23.3%	43.5%
	Rooftop solar scheme	52	30.2%	56.5%
	Fame India Scheme	20	11.6%	21.7%
	Green mutual funds and ESG funds	28	16.3%	30.4%
	Tax incentive for green bonds loans/ energy efficient homes	32	18.6%	34.8%
Total		172	100.0%	187.0%

a. Dichotomy group tabulated at value 1.

Table 2.4 shows acquaintance **about different green investment schemes among common investors**. Out of the total responses, the highest acquaintance is for the **Rooftop Solar Scheme (30.2%)**, followed by **Sovereign Green Bonds (23.3%)** and **Tax incentives for green bonds/energy-efficient homes (18.6%)**. Acquaintance is comparatively lower for **Green/ESG mutual funds (16.3%)** and especially for the **FAME India Scheme (11.6%)**. Above table indicate that although respondents were not much aware about green finance but somehow, they came across with various green scheme. This may be possible due to govt initiative for promoting such schemes.

Last objective of the study is to assess the level of awareness among individual investors about green finance schemes. For this one separate questionnaire is sent only to those respondents who ticked yes about green scheme awareness to examine the actual awareness level of the respondents. This is done to ensure that whether their perception about green awareness is correct or not.

Below table indicate the reliability statistics of statement asked from the respondent. It shows that Cronbach alpha value of the statement is .947 more than 0.7. It shows that the scale demonstrates acceptable internal consistency, suggesting that the items reliably measure the same underlying construct.

3.3(a)Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.946	.947	7



Table 3.1 Awareness about green finance

	Completely Aware	Aware	somewhat Aware	not aware	not aware at all	N
Awareness about green entails	3	6	5	9	1	24
Differentiate between green and traditional product	2	9	4	5	4	24
Environmental impact of companies chosen for investment	3	7	4	6	4	24
understanding about green finance support	3	7	5	7	2	24
Sustainability factors in green decision	4	6	7	5	2	24
Government Initiative for green finance	4	7	3	7	3	24
Role of Green finance in addressing climate Changes	2	8	5	5	4	24

Graph 3.3.1 Awareness about green finance

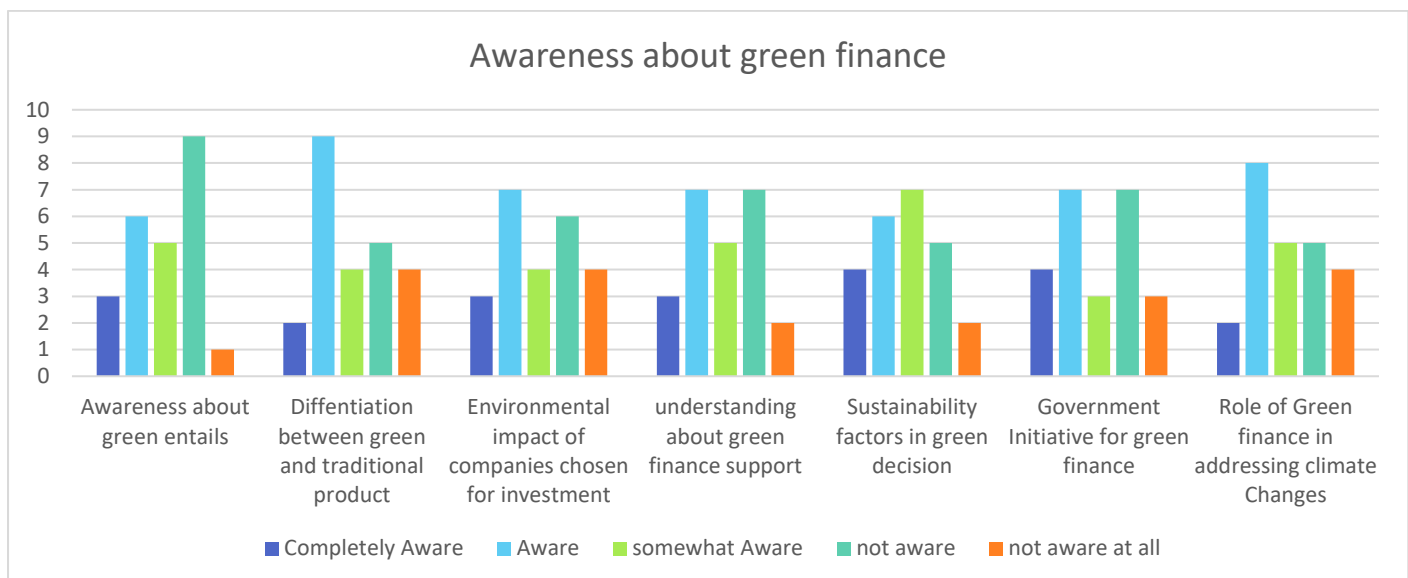


Table 3.1 shows the survey on awareness about green finance among 24 respondents shows that overall awareness levels are moderate, with some categories faring better than others. For instance, **sustainability factors in green decisions** recorded the highest awareness, with 4 respondents (17%) completely aware, 6 (25%) aware, and 7 (29%) somewhat aware. Similarly, **differentiation between green and traditional products** had 9 respondents (38%) aware, though 4 (17%) were not aware at all. On the other hand, weaker areas include **awareness about green entails**, where 9 respondents (38%) were not aware, and only 3 (13%) were completely aware; and **environmental impact of companies chosen for investment**, where 6 (25%) were not aware and 4 (17%) not aware at all. Awareness of **government initiatives for green finance** was mixed, with 7 respondents (29%) aware but another 7 (29%) not aware. Lastly, regarding the **role of green finance in addressing climate change**, 8 respondents (33%) were aware, yet 9 (38%) fell into the not aware categories. These figures suggest that while there is some awareness, significant knowledge gaps remain, requiring targeted awareness campaigns, training, and clearer policy communication.

6. FINDINGS OF THE STUDY

The demographic analysis of respondents shows that the sample is fairly balanced in terms of gender, with 48 percent male and 52 percent female participants. This ensures that both perspectives are adequately represented. In terms of education, 46 percent of the respondents are graduates, 44 percent have completed post-graduation, and 10 percent hold qualifications above the postgraduate level, indicating a highly educated group. The income distribution reveals that 40 percent of respondents earn less than ₹50,000 per month, 24 percent fall within the ₹50,000–₹80,000 range, 12 percent between ₹80,000–₹1,50,000, and another 24 percent above ₹1,50,000 per month.



Investment behaviour analysis indicates that a majority of respondents, 64 percent, invest less than ₹5,000 per month in financial securities, while 20 percent invest between ₹5,000 and ₹10,000, and 16 percent allocate between ₹10,000 and ₹20,000. This pattern reflects cautious investment practices, possibly due to limited disposable income or risk aversion. Gender-based analysis further reveals differences in investment preferences. Male respondents are more evenly distributed across different investment categories, whereas 77 percent of females are concentrated in the lowest category, investing less than ₹5,000 monthly. The Chi-Square test ($p = 0.013$) confirms that the association between gender and investment levels is statistically significant.

Similarly, education plays a role in influencing investment behaviour. Although all educational groups show a preference for investing less than ₹5,000 per month, postgraduates display a greater tendency to invest in the higher range of ₹10,000–₹20,000 compared to graduates and those above postgraduate levels. The Chi-Square test ($p = 0.045$) indicates a significant association between education and investment.

When it comes to sources of information, digital platforms have emerged as the most dominant, with 40 percent of respondents relying on online platforms for investment decisions. Friends and family remain an influential source, accounting for 32 percent, followed by financial advisors at 24 percent. Only 4 percent of respondents depend on social media, suggesting that while digital platforms are increasingly important, traditional personal networks continue to play a significant role in shaping financial decisions.

In terms of investment knowledge, 52 percent of respondents report having a moderate level of knowledge, 32 percent admit to low knowledge, and 8 percent indicate very low knowledge. Only a small proportion 8 percent consider themselves to have high or very high knowledge. Cumulatively, 92 percent of respondents rate their knowledge as moderate or below, pointing to widespread gaps in financial literacy.

Awareness about green finance is particularly low. Only 24 percent of respondents reported being aware of the concept, while 44 percent admitted having no knowledge, and 32 percent were unsure. This suggests that three-fourths of the sample lacks proper awareness of green finance. Further analysis of awareness about green schemes reveals that the Rooftop Solar Scheme is the most familiar (30.2%), followed by Sovereign Green Bonds (23.3%) and tax incentives for green investments (18.6%). Awareness levels are relatively lower for Green/ESG mutual funds (16.3%) and the FAME India Scheme (11.6%), reflecting limited exposure to such initiatives despite government promotion.

Among the 24 respondents who reported awareness of green finance, a more detailed assessment indicates mixed levels of understanding. Respondents showed moderate awareness in areas such as sustainability factors in green decisions and differentiating between green and traditional financial products. However, weaker awareness was observed in understanding the environmental impact of companies, government initiatives, and the role of green finance in addressing climate change. The Cronbach's Alpha value of 0.947 confirms the reliability of the scale used in this assessment. Overall, while some degree of awareness exists, substantial knowledge gaps remain, underscoring the need for targeted awareness campaigns, educational initiatives, and stronger policy communication to promote green finance and sustainable investment practices.

7. CONCLUSION

The study highlights several important insights into the investment behaviour and awareness levels of individual investors. First, the majority of investors prefer low-value investments, with most contributing less than ₹5,000 per month. Gender and education were found to significantly influence investment patterns, with males and postgraduates showing greater diversity and higher levels of investment, respectively. Despite the increasing role of digital platforms as a primary source of information, traditional personal networks such as family and friends continue to exert strong influence over investment decisions.

A critical finding of the study is the generally low level of financial knowledge among respondents, as the majority rated their investment knowledge as moderate or below. This lack of strong financial literacy is further reflected in the limited awareness of green finance, where only one-fourth of respondents had any familiarity with the concept. Although schemes like the Rooftop Solar Scheme and Sovereign Green Bonds are relatively better known, awareness of other green initiatives remains weak. Even among those who claimed awareness, understanding of specific aspects such as environmental impact, government initiatives, and the role of green finance in climate change mitigation was found to be inadequate.



These findings suggest that while investors are gradually adopting digital tools and showing cautious interest in financial markets, there are significant gaps in financial literacy and awareness of sustainable investment practices. To address this, targeted financial literacy programs, investor education workshops, and policy-driven campaigns are essential. Strengthening awareness of green finance, in particular, can empower investors to make more informed choices, contribute to sustainable development, and align personal investments with broader environmental goals.

8. RECOMMENDATIONS

On the basis of findings financial literacy and awareness of green finance remain limited among common investors. Therefore, structured literacy programs and targeted awareness campaigns are essential to bridge this gap. Communication strategies should particularly focus on lesser-known schemes such as ESG mutual funds and the FAME India scheme, using simplified guides, local language content, and visual media to improve understanding. Given that 40 percent of respondents rely on digital platforms for financial decisions, fintech applications and investment portals can serve as effective tools to integrate education on sustainable finance and promote green products, especially through collaborations with popular platforms. Gender-specific interventions are also necessary, as a majority of female respondents were concentrated in the lowest investment category. Women-focused workshops and tailored financial products can encourage broader participation in green investments. Educational institutions can also act as catalysts by embedding sustainable finance into curricula and promoting early awareness through student clubs and competitions. Financial advisors, though currently underutilized, should be trained in green finance so they can act as reliable guides and influencers of investor behavior. At the policy level, regulators should ensure clear disclosure norms for green products and strengthen incentives through tax benefits and subsidies, accompanied by stronger outreach to the public. Finally, long-term engagement through seminars, webinars, and community initiatives, coupled with the communication of tangible economic and environmental benefits, can build trust, strengthen investor confidence, and promote a sustained shift toward green finance adoption.

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