# CHAPTER 8

## Role of Robo-Advisors in Promoting Sustainable (ESG) Investment Portfolios in India

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**ABSTRACT**

Sustainable investing based on Environmental, Social, and Governance (ESG) principles is gaining increasing importance as investors seek to align financial returns with ethical and sustainability goals. This study examines the role of Indian robo-advisory platforms in promoting sustainable investment portfolios and assesses whether these platforms merely provide ESG options or actively encourage investors through default recommendations, highlighted portfolios, and value-based investment themes. The research is based on a mixed-method approach, incorporating platform-based observations and a primary survey of retail investors using digital investment platforms. Descriptive statistical tools are used to evaluate investor awareness, platform visibility of ESG products, and the influence of robo-advisory recommendations on investment decisions. The study finds that while ESG investment products are available, active promotion remains limited, highlighting the need for greater integration of sustainability metrics and investor education to strengthen fintech-enabled sustainable finance in India.

**Keywords:** ESG investing, Robo-advisors, Sustainable finance, Green finance, FinTech in India.

### 1.0 Introduction

Since the last few years, the perspective of people towards investments has started to change. Earlier most of the investors focused on maximizing their financial returns and earning profits. However, today many investors want their investments to support the environment and society in which they live by investing in companies that are acting responsibly towards these factors.

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*DOI: 10.17492/JPI.DYPIU.052608* *ISBN: 978-93-49790-31-5*

Due to this shift in people's perspectives, the concept of sustainable or ESG (Economic, Social, and Governance) has gained popularity around the world and India is no exception to this. Environmental, Social, and Governance (ESG) investing is recently gaining popularity becoming one of the most widely used sustainable investing approaches. This approach not only considers the financial performance of a company but also focuses on how responsibly it operates. It is the practice of considering environmental, social, and governance factors for making investment analysis and decision making.

The environmental aspect focuses on how different businesses interact with nature, including problems such as changes in the climate, carbon emission, waste management, and conservation of scarce resources. The social aspect considers how the businesses manage their relationships with their employees, customers, communities, and their suppliers. The governance aspect comprises corporate leadership, transparency, accountability, board structure, ethical business practices, and shareholder rights. According to Eccles, Ioannou, and Serafeim (2014), companies that implement strong sustainable practices tend to have stronger long-term performance and governance structures.

Several studies have suggested that involving ESG aspects in our investment portfolio might improve the financial outcomes. A comprehensive assessment conducted by Friede Busch, and Bassen (2015) discovered that the majority of academic research shows a positive relationship between ESG practices and a company's financial performance. At the same time, several technological transformations have changed the way financial services are delivered.

Financial Technology (FinTech) has introduced various new digital tools that have streamlined the process of investing making it more accessible. One of such transformations is the introduction of Robo-Advisory platforms. These are automated platforms that provide investment analysis, portfolio management services using algorithms digitally. According to Sironi (2016), robo-advisors are "automated investing platforms that provide algorithm-driven financial planning services with minimal human intervention."

These platforms collect investor data such as their financial goals, risk appetite, and investment horizon through online questionnaires and then suggest suitable portfolios using algorithm-based analysis. Due to their low-cost and convenient model, robo-advisors have gained popularity now.

In India, robo-advisory platforms such as Groww, INDmoney, ET Money Genius, Scripbox, Kuvera, Paytm Money, etc provide access to financial investing options such as mutual funds and Exchange Traded Funds (ETFs). With the growing popularity of sustainable financing options, these platforms also have the potential to promote ESG investments. This study examines whether these platforms in India actively promote ESG investments or simply provide them as optional choices for the investors.

DOI: 10.17492/JPI.DYPIU.052608 ISBN: 978-93-49790-31-5

## 2.0 Literature Review

Robo-advisory services in India are in development. The focus is currently to raise awareness among investors. Even though robo-advisory services use technology, enabling them to avoid certain biases, they cannot yet analyze the risks of individual investors. (Bhatia *et al.*, 2020).

Today, in India, robo-advisory services operate by educating investors. They are yet to be effective in eliminating biases, as well as analyzing investors' risks. (Bhatia *et al.*, 2020c). Robo-advisory services contribute to sustainable investment by providing digital solutions. The study found that investors who take fewer risks and who have a shorter investment horizon prefer sustainable investment. (Faradynawati & Söderberg, 2022).

Individuals who claim to be pro-sustainability do not necessarily mean that they will be effective in their market decisions. Therefore, it is essential to focus on investors' decisions, not their claims. (Brunen & Laubach, 2021). The positive mindset of investors, as well as their strong personal values, might encourage them to use robo-advisory services for sustainable investment. (Kaur *et al.*, 2025).

Robo-advisory services assist investors in diversification by using different financial products like ETFs, as well as algorithms that select different portfolios. (Barile *et al.*, 2025). The industry is still in the early growth stage. The study indicates that ESG investments enable investors to grow sustainably. They can also offer investors higher returns compared to other investments. (Gupta, 2022)

Another thing that the study indicates is that investors can benefit from using robo-advisors rather than traditional financial advisors. This is especially true in cases where investors receive low returns. Robo-advisors help investors make better decisions by using techniques such as algorithms. This is in line with helping investors make sustainable investment decisions.

Kobets *et al.*, (2022) Technology is changing the fund management industry. It is making it possible to introduce new products in the market. This is true in the case of robo-advisors. New investment models help investors perform better. They can help investors make better decisions. They can also help investors make socially responsible investment decisions. (Salampasis, 2017)

Past studies on the subject matter have concentrated on adoption, developed markets, investors, and behavior. However, the role of robo-advisors in promoting ESG investments has not been addressed. This is the main objective of the study. The main objective of the study is to explore the potential of robo-advisory platforms in promoting ESG investments in India.

*DOI: 10.17492/JPI.DYPIU.052608* *ISBN: 978-93-49790-31-5*

## 3.0 Research Methodology.

### 3.1 Objectives of the study

1. To identify the availability of ESG investment products on selected Indian robo-advisory platforms like Groww, IND Money, ET Money Genius, Kuvera, Scripbox, and Paytm Money.
2. To examine the role of Indian robo-advisory platforms in promoting ESG investment options to retail investors.
3. To study whether robo-advisors merely provide ESG investment options or actively promote them through default recommendations, highlighted portfolios, or value-based investment themes.

### 3.2 Methodological framework

This research particularly analyses the role of robo-advisors in promoting sustainable (ESG) investment options in India focusing on selected robo-advisory platforms. The research is based on a quantitative, descriptive, and analytical approach using the primary and secondary data where the primary data has been collected by creating a survey of 75 retail investors through a structured questionnaire using the convenience sampling technique. The secondary data has been collected from various platform websites, research papers, and online databases to support the literature review. The analysis of the collected data is done using statistical tools such as Mean, Standard Deviation, Spearman's Correlation, Weighted Mean, and Frequency and Percentage Analysis. The primary data was collected through Google Forms and analyzed through Microsoft Excel.

### 3.3 Data analysis

The above table shows us the comparison between various robo-advisory platforms available in India and the types of sustainable (ESG) investment products offered by them such as ESG Mutual Funds, ESG ETFs, Green Bonds, and Social Bonds. The analysis shows us that the availability of these investment products varies across the different platforms.

Firstly, ESG Mutual Funds are the investment products which are widely available on all of the above robo-advisory platforms. This tells us that currently the most easily accessible and commonly offered sustainable investment product on the Indian fintech platforms is ESG MFs.

Secondly, ESG ETFs are only available on platforms that offer stock market trading facilities such as Groww and INDMoney. Scipbox only has limited access to this while the other platforms don't provide this product. This suggests that ESG ETFs are mainly supported by platforms that function as brokerage or trading applications. Thirdly, Green

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Bonds and Social Bonds are widely unavailable across many of these platforms suggesting that the integration of these fixed-income products is limited on the robo-advisory platforms.

**Table 1: Availability of ESG Investment Products across Selected Digital Robo-advisory Platforms in India**

| Platforms/Products | ESG Mutual Funds | ESG ETFs | Green Bonds | Social Bonds |
|---|---|---|---|---|
| Groww | ✓ | ✓ | ✗ | **Limited** |
| INDMoney | ✓ | ✓ | **Limited** | **Limited** |
| ET Money Genius | ✓ | ✗ | ✗ | ✗ |
| Scripbox | ✓ | **Limited** | ✗ | ✗ |
| Kuvera | ✓ | ✗ | ✗ | ✗ |
| Paytm Money | ✓ | ✗ | ✗ | **Exchange-based** |

*Source: Complied by researcher*

Overall, the ESG ecosystem in digital investments platforms is still in the early development phase in the Indian landscape

**Table 2: Demographic Profile of Respondents**

| Particulars | Category | Frequency | Mean | Standard Deviation (SD) |
|---|---|---|---|---|
| **Age Group** | Below 20 | 09 | **2.77** | **1.29** |
| | 21-25 | 35 | | |
| | 26-30 | 09 | | |
| | 31-40 | 08 | | |
| | Above 40 | 14 | | |
| **Occupation** | Student | 48 | **1.52** | **0.74** |
| | Salaried Employee | 15 | | |
| | Self Employed | 12 | | |
| **Investment Experience** | Less than 1 year | 15 | **2.57** | **1.10** |
| | 1-3 years | 24 | | |
| | 3-5 years | 14 | | |
| | More than 5 years | 22 | | |

*Source: Primary Survey data*

The respondent's demographic profile is displayed in the table. The majority of participants are young investors, as evidenced by the fact that 35 of the respondents are between the ages of 21 and 25. Students make up the largest group (48 respondents) in

*DOI: 10.17492/JPI.DYPIU.052608* *ISBN: 978-93-49790-31-5*

terms of occupation, followed by self-employed people and salaried workers. In terms of investment experience, the majority of respondents had either one to three years (24 respondents) or more than five years (22 respondents), indicating that a large number of participants have some exposure to investing. The findings indicate that the study primarily comprises young, reasonably active investors, which is appropriate for examining knowledge and attitudes about contemporary investment ideas like ESG investing.

**Table 3: Robo - Advisory Platform Usage and Usage Frequency**

| Particulars | Category | Frequency | Percentage (%) |
|---|---|---|---|
| **Platform Usage** | Groww | 39 | 52.00% |
| | INDMoney | 16 | 21.33% |
| | ET Money Genius | 0 | 0.00% |
| | Scripbox | 23 | 30.67% |
| | Kuvera | 20 | 26.67% |
| | Paytm Money | 26 | 34.67% |
| **Usage Frequency** | Regularly | 39 | 52.00% |
| | Occasionally | 21 | 28.00% |
| | Rarely | 15 | 20.00% |
| | Never | 00 | 0.00% |

*Source: Primary data*

**Table 4: Awareness and Investment Experience in ESG Investing**

| Statements | Category | Frequency | Percentage (%) |
|---|---|---|---|
| **Awareness of ESG investing** | Yes, very well aware | 30 | 40.00% |
| | Somewhat aware | 35 | 46.67% |
| | Heard of it but don't know details | 08 | 10.67% |
| | Not aware | 02 | 2.67% |
| **Source of information about ESG investing** | Social media | 41 | 54.67% |
| | Investment platform/app | 33 | 44.00% |
| | Friends/Family | 28 | 37.33% |
| | Financial news | 24 | 32.00% |
| | Not Aware | 9 | 12.00% |
| **Previous investment in ESG products** | Yes | 18 | 24.00% |
| | No | 57 | 76.00% |

*Source: Primary data*

Groww is the most popular platform (52%), followed by Paytm Money and Scripbox, according to the analysis. While ET Money Genius is not used by respondents,

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other services like Kuvera and INDmoney have considerable utilization. Furthermore, a strong adoption of digital investing platforms among investors is indicated by the fact that over half of the respondents (52%) consistently use these platforms.

**Table 5: Availability & Visibility of ESG Product**

| Statements | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) | Weighted Score | Weighted Mean | Ranks |
|---|---|---|---|---|---|---|---|---|
| ESG investment options are prominently displayed on my robo-advisory platform. | 07 | 17 | 37 | 14 | 00 | 208 | 2.77 | 1 |
| My investment platform actively recommends ESG investment options to me. | 09 | 24 | 38 | 04 | 00 | 207 | 2.76 | 2 |
| I receive notifications or alerts related to ESG investing from my platform. | 09 | 32 | 33 | 01 | 00 | 192 | 2.56 | 3 |
| The platform offers sufficient educational resources regarding ESG investing. | 03 | 29 | 41 | 02 | 00 | 187 | 2.49 | 4 |
| The promotion of ESG investments on my platform influences my investment decisions. | 22 | 01 | 25 | 27 | 00 | 176 | 2.35 | 5 |

*Source: Primary data*

The outcomes indicate that just a small percentage of respondents have low or no awareness of ESG investment, with 46.67% being somewhat aware and 40% being very well aware. The primary sources of ESG information are social media (54.67%) and investment platforms/apps (44%), followed by financial news and friends and family. Still, just 24% of respondents had previously made an investment in ESG products, whereas 76% had not. This implies that while investors are aware of ESG issues, their real involvement in ESG investments is still quite low.

The opinions of respondents on the accessibility and prominence of ESG products on robo-advisory platforms are displayed in the table. Platform recommendations for ESG investments (Mean = 2.76) are ranked second, after the prominent presentation of ESG options for investing (Mean = 2.77). Promotion of ESG investments has the least impact (Mean = 2.35), while notices regarding ESG investing and educational resources are given modest weight. Overall, the findings show that ESG option suggestions and clear visibility are important variables affecting investors on robo-advisory platforms.

ESG awareness, perception, and investment intention are positively correlated, according to the correlation analysis. Higher understanding of ESG investing tends to

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improve investors' perspective and willingness to invest in ESG products, as seen by the somewhat positive connection between ESG awareness and ESG perception (0.54) and investment intention (0.49). In a similar vein, investment intention and ESG perception are positively correlated (0.41). Overall, the findings imply that investors may have stronger investment intentions if they are more aware of and have a favorable opinion of ESG investing.

**Table 6: Perceptions and Suggestions Regarding ESG Promotion on Robo-Advisory Platforms**

| Statement | Category | Frequency | Percentage (%) |
|---|---|---|---|
| **Robo-advisors should promote ESG investments more.** | Yes | 57 | 76.00% |
| | No | 00 | 0.00% |
| | Maybe | 18 | 24.00% |
| **Robo-advisory platforms need improvements for ESG features** | Make ESG portfolios default options | 36 | 48.00% |
| | Provide ESG performance comparison charts | 29 | 38.67% |
| | Send educational notifications | 33 | 44.00% |
| | Reduce expense ratio of ESG funds | 31 | 41.33% |
| | More transparency in ESG scoring | 42 | 56.00% |
| **I would invest more in ESG with better platform support** | Returns are competitive | 34 | 45.33% |
| | Risk is lower | 18 | 24.00% |
| | Platform highlights ESG benefits clearly | 37 | 49.33% |
| | Tax benefits are provided | 26 | 34.67% |
| | Not interested | 09 | 12.00% |

*Source: Primary data*

**Table 7: Spearman's Correlation between ESG Platform Features and ESG Portfolio Visibility**

| ESG Features Statement | Spearman Correlation |
|---|---|
| ESG options prominently displayed | 0.406 |
| Platform actively recommends ESG investments | 0.290 |
| Receives ESG notifications | 0.100 |
| Platform provides ESG educations | 0.220 |
| ESG promotions influence investment decisions | 0.275 |

*Source: Primary data*

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ESG portfolio visibility and a way that ESG investments are prominently displayed have a somewhat positive association (ρ = 0.406), according to the Spearman rank correlation study. This suggests that investor knowledge is increased when ESG portfolios are presented more clearly. Platform recommendations (ρ = 0.290) and investment decision influence (ρ = 0.275) show weak positive correlations, suggesting that more visibility can marginally boost investor interest in ESG investments. Nevertheless, the correlation with ESG notifications is extremely weak (ρ = 0.100), indicating that notifications now have little effect. Overall, the outcomes suggest that investor perception is more influenced by the way ESG portfolios are presented on robo-advisory platforms than by other promotional elements.

## 4.0 Findings and Recommendation

The study indicates that the best way for people to invest in sustainable investment options on large robo-advisory platforms in India is through ESG mutual funds. The other options, like ESG ETFs, green bonds, and social bonds, may not be easily accessible. People may be aware of ESG investment options, but not many have invested in these options. The study indicates that people may be interested in investing in these options if they can see them on the robo-advisory platforms. The study has also shown that awareness of ESG investment and positive association with it can influence people to invest in ESG investment options. Therefore, it can be easy for people to invest in these options with the assistance of robo-advisory platforms. This can be achieved by displaying these options to people and making them easily accessible. The availability of more options for sustainable investment can be achieved by adding ESG ETFs, green bonds, and social bonds. This can be helpful to investors in diversifying their investment portfolios. The display of ESG scores can be improved, and sustainability ideas can be incorporated to gain people's trust to invest in these options.

## 5.0 Conclusion

This research focused on how robo-advisory platforms can contribute to ESG investing in India. The research checked the availability of ESG products, the level of awareness of ESG investing, and the attitude of people toward ESG investing. The results of the research showed that ESG mutual funds are the most accessible option for sustainable investing through most robo-advisory platforms. Other ESG investing options, including ESG ETFs, green bonds, and social bonds, are not as accessible. People are aware of ESG investing, but investing in ESG products is still low. The results of the research showed that the visibility of ESG investing options, the ESG investing options promoted by the

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platform, and the education provided by the platform are significant factors in the decision of investors to invest in sustainable investing. Robo-advisory platforms are significant in promoting ESG investing in India by making ESG investing easy, visible, and transparent. For future research, more investors and more robo-advisory platforms can be included in the research to obtain more results. More research can be conducted in the future by including the performance of ESG investing products and how technology and ESG financial tools contribute to the growth of sustainable investing in India.

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DOI: 10.17492/JPI.DYPIU.052608 ISBN: 978-93-49790-31-5

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DOI: 10.17492/JPI.DYPIU.052608 ISBN: 978-93-49790-31-5