

# Climate Considerations in Investment Decision-Making: Attitudes, Motivations, and Barriers Among Indian Investors

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Agriculture has always been a vital part of India's economy and culture. Like other industries, it is changing with globalization and is increasingly affected by climate change. This paper investigates the research question: How do Indian investors perceive and integrate climate considerations into their investment decision-making, and the barriers that define climate-aligned investment? To answer this, the study used a mixed approach. A literature review of 23 papers from Google Scholar database was carried out to understand how agribusiness investments have been discussed in wider climate or finance literature. Alongside this, a survey of 43 Indian investors was carried out to understand their views about climate risks and opportunities, and the financial data of 2 companies—Godrej Agrovet Limited and Bayer CropScience Limited—were studied and compared with market indices over the period 2020-2025. The results showed a gap between recognition and practice: while 60% of respondents reported that climate influences their investment decisions, only 9.3% ranked agribusiness as their top choice for climate or impact investing. Regression analysis showed a positive relationship between climate-consciousness and willingness to invest in agribusiness. Yet, inconsistent regulations, high upfront costs (67% of respondents), and weak policy support were cited as major barriers. Overall, the findings suggest that while Indian investors are increasingly aware of climate risks, this awareness has not yet translated into broad investment in agribusiness. Stronger policy frameworks, credible ESG-linked instruments, and practical, low-barrier technologies will be critical to closing this gap.

**Keywords:** ESG investing; impact investing; agribusiness; climate; regression

## Introduction

In recent years, India and the world have already started facing climate problems like droughts, unexpected weather, and rising heat. These are no longer just future risks, but issues that are changing how industries and investors behave. Over the past two decades, these climate-driven changes have not only reshaped industry practices, but have also influenced investor behaviour<sup>1</sup>. Almost all industries have witnessed this change and Agriculture is no exception. However, the investment attitudes and barriers related to climate change in the Agribusiness sector of India have not been adequately studied. The literature review also suggests that while mitigation and ESG investments in the agribusiness sector of Africa have been discussed in some papers, the same focus on Asia, and particularly India, is missing.

This study focuses on how Indian investors perceive and integrate climate considerations into their investment decision-making, and the barriers that define climate-aligned investment in the agribusiness sector.

To guide this investigation, the study advances the following hypotheses:

- H1: Climate-related policy strength positively influences investor interest in agribusiness.

- H2: Risk perception and high upfront costs negatively affect investment intentions.
- H3: Higher levels of climate-consciousness among investors are positively associated with willingness to invest in agribusiness.

To explore these hypotheses, this study uses a mixed-methods approach. A literature review of 23 research papers was conducted to understand how agribusiness investments have been discussed in climate and finance literature. A survey of 43 Indian investors was carried out to capture their views about climate risks, opportunities, and barriers to investment. Additionally, financial data from two representative firms—Godrej Agrovet Limited and Bayer CropScience Limited—were compared against market indices over the period 2020–2025 to illustrate investor responses to climate considerations in practice.

This study holds considerable importance because the effects of climate-related risks on investment decision-making in India's agribusiness sector have not been thoroughly explored. Among different industries, the agribusiness sector is particularly vulnerable to climate-related changes due to its reliance on the environment. Yet, impact investing or ESG investing remains an emerging concept in the Indian capital market, with

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only a limited number of investors currently adopting it as a criterion.

This study aims to stand as a base for further research in the same area and help researchers study the investments in the Agribusiness sector in a more detailed manner. Furthermore, it also aims to assist investors who are looking to make ESG investing a part of their portfolio, especially in the Indian Agribusiness sector.

## Literature Review

The literature review aims to evaluate and synthesize the existing research on ESG investments, role of climate-driven market shifts on investments in agriculture, investment trends in agriculture sector around the globe, determinants of investment in agriculture and impact of policies (Table 1). It tests global theories from different markets in the Indian Agribusiness sector like the stakeholder theory, age as a determinant in Agribusiness investments, among others. The review also focuses on the increase in Climate Change Mitigation Technologies (CCMT) and investment trends, drawing an analogy between the two. This review is followed by a comprehensive analysis of the differences in global markets and their relation with the Indian Agribusiness investments. It delves into the investor behaviour in different markets around the globe including Sub-Saharan Africa, South Asia, South America, India, and Europe.

Overall, the literature review highlights various emerging themes around this topic. Nwibo et al.<sup>5</sup> highlight that age positively correlates with investment in agribusiness, suggesting that older investors are more inclined to invest in this sector. Hinrichs and Sobol<sup>11</sup> found a moderately negative correlation between age and sustainability considerations among investors, indicating that older investors may place less emphasis on environmental factors. The comparison between these two studies provides insight into the neutral stance investors adopt toward climate considerations when making investment decisions in the agribusiness sector.

Block et al.<sup>1</sup> suggest that climate-based and mitigation investment is prevalent among European investors, but Serrano et al.<sup>8</sup> previously showed that only a small proportion—particularly 2.3%—goes to the agriculture sector. A major share of agribusiness investments has been targeted toward Africa. Rosegrant et al.<sup>10</sup> found a positive correlation between impact investments and a reduction in greenhouse gases, but Branca et al.<sup>9</sup> concluded that the constant efforts for climate change mitigation in agriculture have also led to increased food insecurity.

Most mitigation investments in agriculture have focused on Africa and South America, but these come with high costs and relatively smaller impacts<sup>6</sup>. The study also identifies South and East Asia as potential markets for further mitigation investments due to higher yields. Khatri-Chhetri et al.<sup>7</sup> found that there are relatively few investors in the Indian agribusiness sector due to a

lack of government policies to balance investor risk. Moreover, much of the investment in Indian agribusiness has been allocated to expanding the use of existing technology, which in some cases undermines the intended purpose of the investment.

Landes and Maurice<sup>4</sup> note that governments often implement subsidies and tax exemptions to promote the establishment and growth of new ventures in the agricultural sector. However, these benefits are not consistently extended to established companies within the same sector, particularly those that have already secured external funding. This imbalance creates a gap between startup owners who rely on government support and investors who may be discouraged by the lack of similar incentives once a startup secures funding. Consequently, the misalignment in tax policies unintentionally slows down investment and limits growth opportunities in the sector.

## Research Methodology

The methodology employed in this study is a mixed approach, which includes literature review, survey, and marketplace analysis. In the initial stage of the literature review, a comprehensive analysis of academic papers, research articles, and industry reports related to agribusiness, impact investing, and investment trends in agriculture was conducted. The primary objective was to engage with existing research, identify key themes and patterns, and examine areas where perspectives align or differ. Additionally, this review aimed to identify gaps in the current body of knowledge—areas that remain underexplored or where further investigation is needed. By establishing a strong foundation through this process, the research seeks to contribute meaningful insights and advance the discourse within the field. It also gave theories and trends from different markets—Europe, South America and Africa—which were further compared to the Indian scenario.

Furthermore, listed companies like Godrej Agrovet Ltd. and JK Agri Genetics Ltd. were analysed and compared with the market index which clearly shows an inverse relation between the index and these stocks from the Agribusiness sector; a similar analysis was conducted with Bayer CropScience Ltd. and Dow Jones Industrial Average.

Last, this study includes surveys from current and potential investors in agribusiness ventures; the questions are focused on their observation of the industry, what they look for in agribusiness startups, their reaction to climate-driven market shifts, and Agribusiness trends. This was used to test the stakeholder theory in the context of the Agribusiness sector. The survey was prepared as a short, structured questionnaire and first tested with 8 respondents to ensure the questions were clear. Investors were contacted through professional networks and referrals. Out of 65 people contacted, 43 completed the survey, giving a response rate of 66%.

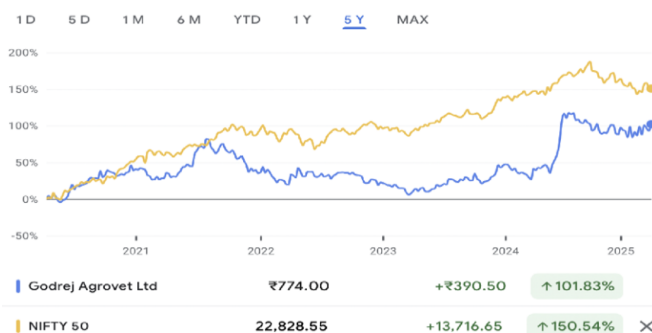
**Table 1** Selected Literature Review

Study	Methodology	Factors	Findings
Block et al. <sup>1</sup>	Mixed	<ul style="list-style-type: none"> <li>Investor perception</li> <li>PE vs VC</li> <li>Impact Investing</li> </ul>	Stakeholder theory is a major factor in ESG investing. Responsibility is a big factor for ESG investments. PE investors are more likely to include climate as a factor because they have stakeholder motive
Rathee and Aggarwal <sup>2</sup>	Quantitative	<ul style="list-style-type: none"> <li>Impact investing</li> <li>Sector based investment</li> </ul>	Major investments are in healthcare sector which is ensued by agriculture and education. Agriculture is generally a secondary choice for investors; generally motivated by the stability of the sector
Martínez-Victoria	Qualitative	<ul style="list-style-type: none"> <li>Behavioral difference in Cooperatives and Investor owned firms</li> </ul>	Cooperatives are generally slow in financial processes like adjustment of debt ratio. They also don't react to market shifts, especially climate shifts as often as IOFs.
McNellis <sup>3</sup>	Mixed	<ul style="list-style-type: none"> <li>Private sector finance</li> <li>Impact Investing</li> </ul>	PE firms around the globe are increasingly investing in agriculture due to the new found appreciation for "hard assets". Certain investment funds are using agriculture as a hedging investment.
Landes and Maurice <sup>4</sup>	Quantitative	<ul style="list-style-type: none"> <li>Agri-investing</li> <li>Foreign Direct investment</li> <li>Impact of taxation</li> </ul>	Generally there are less or no taxes on agriculture but funded startups or firms on the other hand have to pay higher taxes in some nations which result in investors to shift away from this. The unorganised nature of this sector also affects a lot of foreign investors
Nwibo et al. <sup>5</sup>	Quantitative	<ul style="list-style-type: none"> <li>Determinants for investors</li> <li>Investor appetite</li> </ul>	Market size is a major motivation factor for investors. Age has a positive effect on the decision of an individual to invest in the agribusiness sector.
Lobell et al. <sup>6</sup>	Mixed	<ul style="list-style-type: none"> <li>Climate adaptation</li> <li>Mitigation Investment</li> </ul>	Mitigation investments have generally been focused in Africa and South America, but these have very high costs and smaller impact. South and east Asia is the potential market for this because of higher yields.
Khatri-Chhetri et al. <sup>7</sup>	Mixed	<ul style="list-style-type: none"> <li>Government action</li> <li>Sustainability</li> <li>Impact investments</li> </ul>	Government policies need to adapt to balance investor risk. A major chunk of investment in agriculture or agribusiness sector is used to increase the use of existing technologies which beats the purpose of such investments.
Serrano et al. <sup>8</sup>	Mixed	<ul style="list-style-type: none"> <li>Impact of policies</li> <li>Low share of investment in Agriculture</li> </ul>	Most of the climate change policies or regulations are intended for energy-intensive sectors and not explicitly focused on agriculture. Only 2.3% of the EU financial contribution goes to the agriculture sector.
Branca et al. <sup>9</sup>	Quantitative	<ul style="list-style-type: none"> <li>Climate-Smart Agriculture Investments</li> <li>Agriculture industry challenges in Africa</li> </ul>	The constant tries to mitigate climate change have increased food insecurity in some parts. New policies are taking an approach to balance production and mitigation initiatives.
Rosegrant et al. <sup>10</sup>	Quantitative	<ul style="list-style-type: none"> <li>SDG-2</li> <li>Investment Gap</li> </ul>	A positive correlation is seen between investments and reduction in GHG emissions.
Hinrichs and Sobol <sup>11</sup>	Mixed	<ul style="list-style-type: none"> <li>ESG Investments</li> <li>Correlation of age</li> </ul>	The survey found a negative correlation between age and ESG investment motives among bankers. Education moderates the relationship between the risk minimization motive and the green tradeoff intention.

This paper leverages the Theory of Planned Behavior<sup>2,4</sup> to explore the reason for the limited investor interest in the Indian agribusiness sector, particularly in the context of climate-based investments. Additionally, the study draws on Social Exchange Theory to understand the broader motivations behind investor behaviour—suggesting that beyond financial returns, investors may also be influenced by intangible benefits such as social value, reputation, and ethical fulfilment when considering agribusiness ventures.

## Marketplace Evidence

The share price patterns of agribusiness stocks—specifically Godrej Agrovet Limited (Figure 1) and Bayer CropScience Limited (Figure 2)—were analyzed in relation to key market indices. The findings revealed an inverse relationship between agribusiness stocks and broader market indices. This suggests that when the overall market declines, agribusiness stocks tend to perform relatively better.



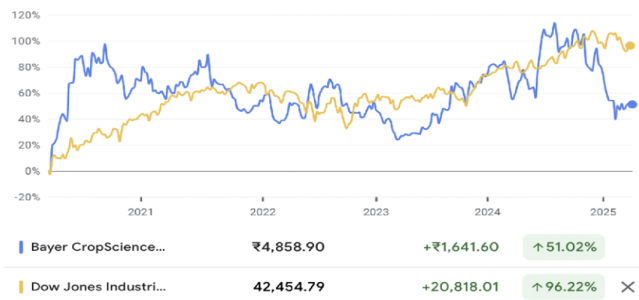
**Fig. 1** Price patterns of agribusiness stocks: Godrej Agrovet Limited & NIFTY 50

Source: Google Finance

A key reason for this trend is the perception of the agribusiness sector as a stable and resilient investment. Investors often view it as a defensive sector, prioritizing it during economic downturns or periods of financial uncertainty. This characteristic was evident during the COVID-19 market crash, where Godrej Agrovet Limited was among the first stocks to recover, reinforcing the sector's reputation for economic resilience.

These insights highlight the agribusiness sector's role as a risk-averse investment, particularly in times of recession or economic instability, making it an attractive option for risk-averse investors. A similar pattern was observed when Bayer CropScience Limited was compared to the Dow Jones Industrial Average. Both the graphs generally moved in opposite directions, showing investors preference towards Agribusiness stocks when they are looking for stability in investments.

Both stocks that have been studied and the pattern that has been seen clearly evidenced the findings of Rathee and Ag-



**Fig. 2** Dow Jones Industrial Average and Bayer CropScience Ltd. price pattern comparison

Source: Google Finance<sup>12</sup>

garwal<sup>2</sup>, who argued that investor motivation for investing in agriculture or agribusiness is the stability of the sector.

It is crucial to note that this comparison is illustrative and does not account for company-specific factors such as product mix or management decisions, which also affect stock performance. The two firms were selected deliberately—Godrej Agrovet as a diversified Indian agribusiness and Bayer CropScience as a global input-oriented company—to capture variation within the sector. Benchmarking them against major indices helps highlight the relative defensiveness of agribusiness, particularly visible during the COVID-19 period.

## Survey

The survey was conducted among 43 private investors, employees of investment firms, and venture capitalists with experience in the Indian investment and agribusiness market. The demographic consisted of 21 private investors, 12 Venture Capitalists, and 10 Institutional investors across India. It aimed to examine investor appetite and decision-making behavior in response to climate shifts. Participants were presented with general questions to assess interest in different investment markets and strategies; furthermore, they were also asked some case-based scenarios to assess their reactions to specific investment situations.

The primary objective of the survey questionnaire was to identify significant trends in the Indian investment ecosystem, specifically focusing on agribusiness and Environmental, Social, and Governance (ESG) investing. This survey is crucial to the study as it supports the literature review and provides comparative data against global markets such as Europe and Africa. Furthermore, it offers insights into investor preferences regarding agricultural investments, a sector crucial for India's economic and sustainability goals.

The responses in India (Table 2) differ a lot from those in markets like Europe or Africa. Around 45% of Indian investors view agribusiness as moderately attractive (Figure 3), indicating

**Table 2** Survey Questionnaire

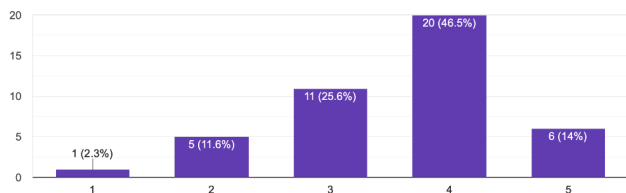
Questions	Selected Verbatims (Participant's Answers)	Percentage Responses
Q1. On a scale of 1–5, how significantly do you think climate change has influenced the investment decisions for the investors?	<ol style="list-style-type: none"> <li>1. Least likely</li> <li>2. Likely</li> <li>3. Neutral</li> <li>4. Likely</li> <li>5. Most likely</li> </ol>	<ol style="list-style-type: none"> <li>1. 2.3%</li> <li>2. 11.6%</li> <li>3. 25.6%</li> <li>4. 46.5%</li> <li>5. 14%</li> </ol>
Q2. On a scale of 1–5, how likely do you think the investors are interested in investing in an Agribusiness Startup?	<ol style="list-style-type: none"> <li>1. Least likely</li> <li>2. Likely</li> <li>3. Neutral</li> <li>4. Likely</li> <li>5. Most likely</li> </ol>	<ol style="list-style-type: none"> <li>1. 4.7%</li> <li>2. 18.6%</li> <li>3. 44.2%</li> <li>4. 23.3%</li> <li>5. 9.3%</li> </ol>
Q3. What do you think would be the reason(s) for the investors to consider climate as a major factor?	<ul style="list-style-type: none"> <li>• Ethical Responsibility</li> <li>• Stakeholder Management</li> <li>• CSR Regulations</li> <li>• Risk Management</li> <li>• Reputational benefits</li> <li>• Portfolio diversification</li> </ul>	<ul style="list-style-type: none"> <li>• 16.3%</li> <li>• 2.3%</li> <li>• 23.3%</li> <li>• 25.6%</li> <li>• 18.6%</li> <li>• 14%</li> </ul>
Q4. How likely are the investors to invest in a firm which is moving towards Renewable energy (or another technology) which will affect its profit in the short term but it is a major step towards climate change mitigation?	<ol style="list-style-type: none"> <li>1. Least likely</li> <li>2. Likely</li> <li>3. Neutral</li> <li>4. Likely</li> <li>5. Most likely</li> </ol>	<ol style="list-style-type: none"> <li>1. 2.3%</li> <li>2. 4.7%</li> <li>3. 27.9%</li> <li>4. 51.2%</li> <li>5. 14%</li> </ol>
Q5. Which climate change mitigation technology would an investor prioritize while investing in the Agribusiness sector?	<ul style="list-style-type: none"> <li>• AI-driven precision agriculture</li> <li>• Renewable energy integration (e.g., solar cold storage)</li> <li>• Drought-resistant crop genetics</li> <li>• Carbon sequestration solutions</li> </ul>	<ul style="list-style-type: none"> <li>• 23.3%</li> <li>• 51.2%</li> <li>• 14%</li> <li>• 11.6%</li> </ul>

Questions	Selected Verbatims (Participant's Answers)	Percentage Responses
Q6. What barriers prevent greater investment in climate adaptation technologies in India? (Select all)	<ul style="list-style-type: none"> <li>• Lack of standardized metrics for climate impact</li> <li>• High upfront costs</li> <li>• Policy uncertainty</li> <li>• Unclear Return on Investment</li> </ul>	<ul style="list-style-type: none"> <li>• 48.8%</li> <li>• 67.4%</li> <li>• 51.2%</li> <li>• 53.5%</li> </ul>
Q7. How strong on a scale of 1–5, do you feel is India's policy framework for investors looking to make an Impact investment in Agriculture? (Agri-business government policies for Agribusiness)	<ol style="list-style-type: none"> <li>1. Not strong</li> <li>2. Weak</li> <li>3. Neutral</li> <li>4. Strong</li> <li>5. Very strong</li> </ol>	<ol style="list-style-type: none"> <li>1. 14%</li> <li>2. 14%</li> <li>3. 46.5%</li> <li>4. 20.9%</li> <li>5. 4.7%</li> </ol>
Q8. How likely on a scale of 1–5 do you feel an investor is to invest in an agribusiness startup already funded by "The Agricultural Accelerator Fund" by the Indian Government?	<ol style="list-style-type: none"> <li>1. Least likely</li> <li>2. Likely</li> <li>3. Neutral</li> <li>4. Likely</li> <li>5. Most likely</li> </ol>	<ol style="list-style-type: none"> <li>1. 2.3%</li> <li>2. 20.9%</li> <li>3. 39.5%</li> <li>4. 20.9%</li> <li>5. 16.3%</li> </ol>
Q9. How likely on a scale of 1–5 do you feel an investor is to invest in an AI driven startup for farmers, which works to mitigate climate change but also has scalability challenges?	<ol style="list-style-type: none"> <li>1. Least likely</li> <li>2. Likely</li> <li>3. Neutral</li> <li>4. Likely</li> <li>5. Most likely</li> </ol>	<ol style="list-style-type: none"> <li>1. 4.7%</li> <li>2. 16.3%</li> <li>3. 30.2%</li> <li>4. 32.6%</li> <li>5. 16.3%</li> </ol>
Q10. According to you, which sector would an Indian investor, who is looking to make an impact investment, prioritise as their primary investment?	<ul style="list-style-type: none"> <li>• Healthcare</li> <li>• Agribusiness</li> <li>• Education</li> <li>• Renewable Energy</li> <li>• Artificial Intelligence</li> </ul>	<ul style="list-style-type: none"> <li>• 9.3%</li> <li>• 9.3%</li> <li>• 14%</li> <li>• 37.2%</li> <li>• 30.2%</li> </ul>

a neutral but cautious approach. However, a significant number of responses leaned toward a higher likelihood of investment, suggesting a gradual shift in sentiment toward the sector.

Additionally, over 45% of respondents stated that climate change has strongly influenced their investment decisions in recent years. This highlights a growing link between interest

On a scale of 1–5, how significantly do you think climate change has influenced the investment decisions for the investors?  
43 responses

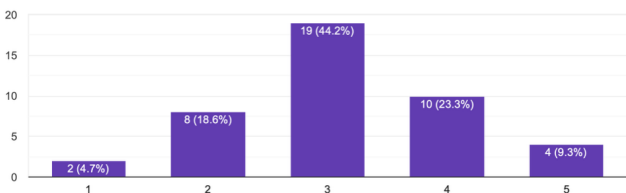


**Fig. 3** Likeness to consider climate while investing

in agribusiness and a focus on ESG (Environmental, Social, and Governance) factors. Investors are increasingly considering sustainability alongside financial returns, signalling a broader shift in priorities. These trends suggest that the agribusiness sector in India could see increased investments, particularly in areas that address climate change and sustainability. As investor confidence grows, agribusiness startups focusing on ESG principles may find more opportunities, making the sector a promising space for future investment and innovation.

The respondents were asked about the main reason for considering climate as a major factor in their investments, and almost 50% of them rated either ‘Ethical responsibility’ or ‘Regulations’ as the primary factor. Another interesting trend is that only 2.3% of respondents rated ‘stakeholders’ demand’ as a major factor, but when a similar survey was conducted by Block et al.<sup>1</sup>, 9.3% of respondents, who were PE and VC investors in Europe, rated ‘stakeholders’ demand’ as the most important factor for their consideration of climate<sup>1</sup>.

On a scale of 1-5, how likely do you think the investors are interested in investing in an Agribusiness Startups?  
43 responses

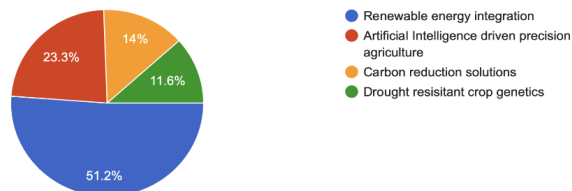


**Fig. 4** Likeness of Investing in Agribusiness

The survey shows a preference of investors for ‘Renewable Energy’ because when they were asked which technology investors would be most likely to invest in the Agribusiness sector, over half of the respondents — particularly 51.2% — have chosen ‘Renewable Energy Integration’ as the most preferred choice for investors. A preference for renewable energy was also seen when the investors were asked the priority for an Impact Investor in India, where 37.2% rated Renewable energy as the most preferred, which was followed by Artificial intelligence being preferred by 30.2% of respondents. This is crucial for

our study because it helps us to delve into investor preference and use it to determine the way for increasing investments into Agribusiness startups.

Climate change mitigation technology would an investor prioritize while investing?  
Responses



**Fig. 5** Interest in Mitigation Technology

The survey also highlights a significant disagreement with government policies among investors. Nearly half (46.5%) of respondents rated India’s policy framework as only moderately strong for impact investors, indicating concerns about its effectiveness. Additionally, almost 60% of respondents stated that investors are only slightly to moderately likely to invest in an agribusiness startup that has already received funding from the Indian government. This suggests a level of skepticism about government-backed initiatives, potentially due to regulatory challenges or perceived inefficiencies.

Investor skepticism toward government policies in agribusiness appears to stem from multiple policy-related factors. In particular, inconsistencies between central and state-level regulations generate uncertainty, contributing to confusion among investors in an already volatile sector. Moreover, frequent policy shifts associated with political instability in several regions further constrain the prospects for long-term investment. These dynamics underscore the need for greater policy coherence and stability to enhance investor confidence in the agribusiness sector.

At last, the respondents rated ‘High Upfront Costs’ as the major barrier for investments into climate adaptation technologies in India with 67.4% of respondents agreeing to it. Apart from this, other factors like unclear ROI, policy uncertainty and lack of a standardized metric were rated almost equally strong barriers with almost 50% of respondents voting for the three.

## Regression Analysis

To better understand the complex interplay between climate considerations and investment behaviour in India’s agribusiness sector, this study employs a series of regression models aimed at uncovering potential associations and drivers of investor interest. These three models help the study to explore various possible factors that could influence the investor’s likelihood of investing into the agribusiness sector (Table 3).

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The variables chosen for the regression analysis were developed after a careful review of the survey responses. One of the most commonly noted concerns among investors was the influence of government policies on the agribusiness sector in India. As a result, the variable “Government Policies for Agri-business” was included to reflect how policy support may impact investment decisions. Another key area of interest was the integration of renewable energy into agribusiness operations, which appeared as a strong priority for many respondents. To identify the most relevant variables, responses to the question “Which climate change mitigation technology would an investor prioritize while investing in the Agribusiness sector?” and a special attention was also given to the survey questions that used a Likert scale to assess the importance or likeliness of consideration of various factors.

The Likert scale has been treated as continuous. Additionally, Models 2 and 3 were conceptualized as exploratory analyses. Their findings were interpreted with caution and were not incorporated into the primary conclusions of the study, as these models were intended to identify potential patterns or relationships rather than to provide definitive evidence.

Model 1 in this study was designed to explore the possible linear relationship between two key variables: the likelihood of investors considering climate-related factors in their decision-making process, and their likelihood of investing in the agribusiness sector. The purpose of this model was to answer the primary question that are the two—climate and agribusiness investments—even related to each other; this analysis supported further research into the same area. The Model 2 studies the relation between investor’s interest in Agribusiness investments and their reason of considering climate as a major factor; it also includes investor’s response towards government policies for Agribusiness for agribusiness investments in India and how they approach government funded startups. Lastly, Model 3 just replaces the reason for climate consideration with their preference of innovative technology in agriculture, which they would prefer to invest in. This model only includes the factors that are directly related to Agribusiness investments.

The results from the first regression model reveal that Climate has a statistically significant and positive influence on the dependent variable, with a coefficient of 0.455 and a p-value less than 0.01. This indicates a strong and reliable association between an investor’s consideration of climate-related factors and their likelihood of engaging with the agribusiness sector. Specifically, for every one-unit increase in the extent to which investors factor in climate concerns during their decision-making, there is an expected 0.455 unit increase in their likelihood to invest in agribusiness, assuming all other variables remain constant. This finding suggests that investors who are more climate-conscious tend to show greater interest in industries like agribusiness, which are deeply impacted by environmental sustainability.

The second model shows a relation between several factors.

Government policies for Agribusiness (coefficient = 0.3122,  $p = 0.0642$ ) comes closest to statistical significance and deserves emphasis. While it is not below the 0.05 threshold, its marginal p-value and positive coefficient suggest that strong and clear policy signals could influence investment sentiment. This supports existing theoretical frameworks asserting that institutional stability and regulatory confidence attract investment, especially in emerging and sustainability-linked sectors like agribusiness.

A similar correlation holds true for risk management and reputational benefits, which also show strong positive coefficients (1.57 and 1.48, respectively). Although their p-values (0.15 and 0.13) fall just short of statistical cutoffs, the underlying implication is clear: investors may be motivated by the desire to reduce risk and improve public perception, even if the evidence isn’t yet definitive in a statistical sense.

Portfolio diversification also emerges as a notable influence, with a relatively high coefficient of 1.37. Although the higher p-value indicates a smaller impact on investment trends. Still, the direction and size of the effect point toward a potential trend that could become more pronounced with broader data or in different markets.

Other variables—such as ethical responsibility, regulations, and government support—also show positive relationships, but with higher p-values, their effects are less conclusive. Still, their presence in the model reflects certain themes in investor behavior that cannot be put into a theory as they are less significant.

Last, the third model considers the factors directly related to Agribusiness. The clearest signal comes from carbon reduction solutions, which stand out with a strong positive coefficient of 1.09 and a highly significant p-value of 0.006. This tells us that when agribusiness is directly tied to cutting carbon emissions—whether through better land management, cleaner processes, or supply chain decarbonization—investors notice and react to it. In fact, they respond quite strongly. This isn’t surprising in a world where carbon footprints are now being tracked, priced, and regulated. Investors appear to be aligning with what’s measurable and what’s already starting to carry financial weight.

Government policies for Agribusiness again show up as a meaningful factor, with a coefficient of 0.36 and a statistically significant p-value of 0.028. Investors seem to care less about whether governments say they support the sector and more about how clearly and consistently they back it with rules, incentives, and frameworks. A strong policy environment doesn’t just encourage investment—it makes it safer. This reinforces the earlier finding that credible regulation builds investor confidence.

Some of the newer or more technical solutions show a different trend. For example, drought-resistant crop genetics show a large effect size (1.04) but lack statistical significance. This could mean that investors may see the potential, but don’t yet have the tools to evaluate it confidently.

One of the more surprising results is AI-driven precision agriculture, which shows a very small and even slightly negative

**Table 3** Multinomial Regression Results

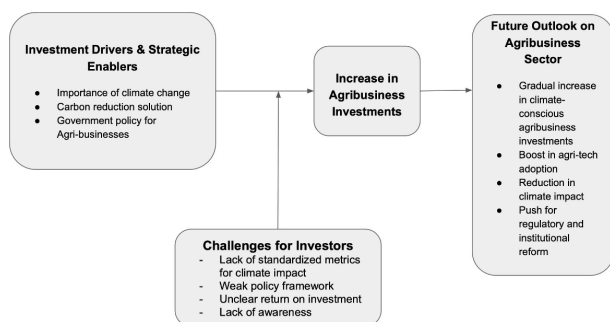
Variables	Model 1	Model 2	Model 3
<b>Dependent Outcome: Interest in investments in Agri businesses</b>			
Intercept	1.509*** (0.537)	-0.371 (1.032)	0.283 (0.686)
Importance of Climate Change	0.455*** (0.145)	0.222 (0.175)	0.314* (0.158)
Ethical Responsibility		1.105 (0.943)	
CSR Regulations		1.202 (0.946)	
Risk Management		1.516 (0.938)	
Reputational Benefits		1.483 (0.955)	
Portfolio Diversification		1.370 (0.979)	
Government Policies for Agri-business	0.311* (0.163)	0.362** (0.158)	
Government Support		0.153 (0.162)	0.105 (0.156)
Renewable energy integration			0.431 (0.387)
Artificial Intelligence driven precision agri-culture			-0.026 (0.449)
Carbon reduction solutions			1.098*** (0.371)
Drought resistant crop genetics			1.044 (0.579)

Note: \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

coefficient (-0.026) with a very high p-value (0.95). This may suggest that while AI is often talked about in the area of innovation, it isn't being seen as a major technology in agribusiness.

While this analysis shows correlations between several variables, some of the findings do not hold practical significance. This limitation may be due to the small sample size of the study, which could be addressed in future research with larger samples. Although none of the variables appeared to be strongly correlated, checks for multicollinearity were not performed and should be considered in future studies to ensure the stability of regression estimates.

## Discussion



**Fig. 6** Process framework for the drivers affecting agribusiness investments

Source: Created by Author, 2025

The proposed framework is a result of a mixed method of

research. It was observed that there are other factors which are more significant for Indian investors while investing into Agribusiness, for instance, Agribusiness government policies for Agribusiness was found to be a major concern in the Indian investment circuit.

The literature review was especially helpful in identifying the broad theoretical ideas that have shaped agribusiness investments globally, and in highlighting the gaps specific to India. For instance, Block et al.<sup>1</sup>, Serrano et al.<sup>8</sup> and Trisos et al.<sup>13</sup> show how climate-based investing is growing in Europe and Africa, yet the actual share of investment in agribusiness remains small<sup>1,8</sup>. A similar pattern was also seen in the findings from the Indian market, while, Indian investors are increasingly considering climate-based investing, it is still a new concept among them. Further, Khatri-Chhetri et al.<sup>7</sup> had concluded that the government policies need to adapt in order to motivate more people to invest in Agribusiness, the same was also seen as a result of the survey and the regression analysis<sup>7</sup>.

A major difference was also observed in the nature and perception of both investors and investments in India and other markets such as Africa or Europe. While in Africa most investments are focused towards increasing the production—certain studies conclude that these have been unsuccessful in doing so—to reduce food insecurity in the region; on the other hand, a major chunk of Agribusiness investments in India is focused towards development of new technologies for sustainability or new crop variants. This is also shown by the survey that a majority of the investors are interested in Renewable Energy Solutions or AI-driven Agri-solutions.

In terms of investor motivation, the survey and the literature showed both overlaps and divergences. The survey showed that investors in India are more motivated by risk management

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(25.6%), CSR compliance (23.3%), and reputational benefits (18.6%) than by stakeholder pressure, which only 2.3% of respondents selected. This finding contrasts sharply with Block et al.<sup>1</sup>, who found that stakeholder demand was one of the top three motivators for ESG investments among European investment firms. These investment motives other than monetary also comply with the Social Exchange Theory, which suggests that individuals and organizations engage in social work or interactions with an expectation of reciprocal benefit—not always financial, but often social, moral, or reputational.

The marketplace analysis further validated these concerns and added a behavioural dimension to them. For example, the inverse relationship observed between agribusiness stocks (like Godrej Agrovet and Bayer CropScience) and broader market indices suggests that investors view agribusiness as a relatively stable or counter-cyclical sector—especially during downturns. This finding supported the conclusion from Rathee and Aggarwal<sup>2</sup>, who suggested that stability, rather than innovation, is often the real reason behind agriculture-related investments<sup>2</sup>.

The application of the SOR (Stimulus–Organism–Response) framework further helps to explain these behavioural patterns. The stimulus in this case is the growing urgency of climate change, evolving policies, and rising importance of ESG trends. The organism—the investors—responds to these stimuli through different motives: risk management, ethical responsibility, government regulations, and even reputational concerns. The response is the eventual investment decision, whether they choose to invest in the agribusiness sector, and if so, in which technology or innovation. Literature like Hinrichs and Sobol<sup>11</sup>, which explored correlations between education, age, and ESG behaviour, also supported the above stated approach by showing that investors' values often act as moderators between climate awareness and actual behaviour<sup>11</sup>.

The survey and market analysis suggest that despite growing awareness, only few investors show an active interest in climate-based investments within the agribusiness sector. This behaviour can be interpreted through the Theory of Planned Behavior<sup>2,4</sup> which posits that even individuals with positive attitudes toward an action—such as climate-based investing—may hesitate to follow through unless they perceive strong social support and believe that the necessary policy and infrastructural conditions are present.

## Implications and Future Research Directions

This study examines how climate-driven market shifts have influenced investor appetite for AgriBusiness startups over the past two decades. While existing research often focuses on broader agricultural trends or general investment patterns, it frequently overlooks the specific impact of climate-related factors on investor decision-making in this sector.

This study draws an analogy between climate-driven market shifts and their impact on the agriculture sector. It has explored the different perspectives of Stakeholders in the Agribusiness sector.

The primary aim of this study is to help policy makers in understanding the importance of government policies for the investments in Agribusiness as this was seen as the most important factor. This study could also benefit investors by assisting them in learning about emerging investment strategies, particularly those driven by climate considerations.

This study may help policymakers, investors, and startup owners, but this study has some limitations:

- The research was limited in scale with a limited number of investors due to the lack of time and resources. The survey was limited to a select number of investors, which, although insightful, may not fully reflect the wide diversity of investment perspectives across different investor classes—such as institutional funds, angel investors, and informal capital networks
- It was only focused on the Indian market as the reach was limited, hence, the findings may not be easily generalised to other regions where the variables might differ.
- There was only a limited amount of literature available related to the topic, precisely, there were even less number of studies in India.
- This study focuses on Agribusiness as a broad sector, ignoring the internal divisions like Agritech, supply chain logistics, horticulture among others.
- The regression analysis does not incorporate controls for demographic or portfolio-related variables as the survey instrument was primarily designed to capture climate-related attitudes and perceptions.

Future research on this topic can significantly contribute to a better understanding of the agribusiness sector by exploring specific sub-sectors that fall under agribusiness. This can include areas such as agro-processing, sustainable farming practices, agri-tech innovations, and supply chain management. Conducting surveys or interviews with a larger and more demographically diverse group of investors—spanning various age groups, regions, and investment backgrounds—will provide more comprehensive insights into investor sentiment. Additionally, future studies can delve into particular economic and behavioral theories that influence investment decisions, especially within the context of the Indian Agribusiness Sector. This theoretical focus will help explain the underlying motivations and patterns that drive investment trends in response to climate-driven and market.

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## Conclusion

The primary aim of this study was to examine how climate change-induced market shifts are influencing investor behaviour in India's agribusiness sector. It aimed to understand the motivations, challenges, and strategic responses of stakeholders in light of climate-resilient agricultural investments.

The primary question of this study was to determine if climate affects the decisions of Indian investors with special emphasis on Agribusiness. This study found that Indian investors are likely to consider climate as a major factor for their investment, but this is challenged by the Theory of Planned Behavior (Ajzen, 1985), hence some of the investors might hesitate to use it where other stakeholders are involved. This study has also found that Risk management and Government regulations are the major reason for investors considering climate as a factor while investing.

A surprising finding shows that only 23% of respondents were interested in AI-driven agriculture solutions, while 51% of them were inclined towards renewable energy integration in agriculture. This suggests that the startups in the Agribusiness sector should not only focus on new-age AI solutions, but rather build upon the older foundation of renewable energy.

This paper also concludes that climate-based investments in Agribusiness will take time to popularize in India, because 60% of survey respondents acknowledged that climate influences investment decisions, only 9.3% considered agribusiness their top choice for impact investing.

The findings show that over half of the respondents believe that Agribusiness is not an attractive investment due to government policy uncertainty and unclear return on investment. Only 2.3% of investors consider climate-conscious investing because of stakeholder management, and this points towards the lack of awareness among major stakeholders. These findings suggest that investments in the Agribusiness sector will only increase if the awareness is paired with strong and consistent government policy.

However, the study is limited by its sample size and focus on select investor groups. Future research could expand the dataset across regions and investor categories to validate these findings.

## References

- 1 J. Block, *Climate issues in portfolio investment decisions: a comparison of Private equity and venture capital.*
- 2 P. Rathee and S. Aggarwal, *Investors Preference for Creating Impact: (A study to understand impact investors preference while making investment in India.*
- 3 P. E. McNellis, *Foreign investment in developing country agriculture The emerging role of private sector finance.*
- 4 M. R. Landes, *The environment for agricultural and agribusiness investment in India.*
- 5 S. Nwibo and J. Alimba, *Determinants of investment decisions among agribusiness investors in South-East, Nigeria.*
- 6 D. B. Lobell, U. L. C. Baldos and T. W. Hertel, *Climate adaptation as mitigation: the case of agricultural investments.*
- 7 A. Khatri-Chhetri, *Financing climate change mitigation in agriculture: assessment of investment cases.*
- 8 P. V. Serrano, L. Altenburg and P. Kumar, *An exploratory analysis on agritech policies, innovations and funding for climate change mitigation.*
- 9 G. Branca, *Identifying opportunities for climate-smart agriculture investment in Africa.*
- 10 M. W. Rosegrant, T. B. Sulser and K. Wiebe, *Global investment gap in agricultural research and innovation to meet Sustainable Development Goals for hunger and Paris Agreement climate change mitigation.*
- 11 K. Hinrichs and I. Sobol, *The impact of sustainability considerations on investment intention the case of generation Y.*
- 12 Godrej, *Godrej Agrovet Limited share price comparison with NIFTY 50 Index*, <https://g.co/finance/GODREJAGRO:NSE?window=5Y&comparison=INDEXNSE%3ANIFTY.50>.
- 13 C. Trisos, *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.* - Africa.