



Sustainable finance: A review of literature

Dr. Shashidhara D¹, Gokul Tilak²

¹ Assistant Professor, Department of Commerce, Davangere University, Davangere, Karnataka, India

² Research Scholar, Department of Commerce, Davangere University, Davangere, Karnataka, India

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Abstract

This study reviews existing research on sustainable finance, green finance, ESG, green accounting, and carbon accounting by comparing Indian and foreign studies. It is based on secondary data collected from published research articles, journals, books, reports, and government publications. The study understands the current trends, research methods, major findings, and research gaps in sustainable finance. The findings show that sustainable finance plays an important role in protecting the environment, improving corporate transparency, supporting responsible investment, and promoting sustainable economic growth. Indian studies mainly focus on government policies, green finance initiatives, and ESG implementation, while foreign studies use more advanced research methods and focus on global trends, sustainable banking, climate finance, and carbon accounting. However, both Indian and foreign studies highlight challenges such as greenwashing, lack of standard reporting standards, limited awareness, and regulatory issues. The review concludes that more integrated and empirical research is needed to better understand the long-term impact of sustainable finance on business and the environment.

Keywords: Sustainable finance, green finance, green accounting, carbon accounting, sustainability

Introduction

Sustainable finance has grown rapidly in recent years due to increasing concerns about environmental sustainability and responsible business practices. This review examines both Indian and foreign studies on sustainable finance, green finance, ESG, green accounting and carbon accounting. The reviewed studies highlight major research trends, methodologies, key findings, and research gaps, demonstrating that sustainable finance plays a crucial role in promoting sustainable economic growth, corporate transparency, and environmental responsibility while emphasizing the need for stronger regulations and standardized reporting frameworks.

Objective of the study

- To Study the Existing Literature review on Sustainable Finance and its allied concepts.

Research methodology

This study is based on secondary data. The research adopts an analytical literature review approach to understand the concepts of Green Finance, ESG (Environmental, Social and Governance), Green Accounting, and Sustainable Finance. The required information has been collected from published research articles, journals, books, reports, and government publications.

Review of Literature

Sustainable Finance: Concepts, Trends and Integrated Approaches

Indian studies

Kumar A & *et al.*, (2024) ^[13] provides a comprehensive review of research on the relationship between green finance and environmental sustainability by using bibliometric analysis and content analysis for the period of 2011-2023^[37], with a sample of 447 articles and tools used were Vos viewer and Prisma framework. The study finds that green

finance plays a significant role in promoting sustainable development through green innovation, renewable energy investment, climate change mitigation, and supportive financial policies.

Jayaprakash & *et al.*, (2026) examine how green finance, green marketing and green accounting jointly contribute to sustainable business growth and environmental performance, and to develop an integrated perspective and to develop an integrated perspective for future research in sustainable management. In this study, they used a comprehensive narrative review approach and thematic analysis was used to analyse. The major findings were green finance, marketing and green accounting play an important role in promoting sustainable business practices, green investment for lowering carbon emission, building market value and improving environmental accountability, but challenges like no proper standards and green washing still exist.

Sharma A & *et al.*, (2026) ^[24] mainly focused on the development and role of sustainable finance, Green accounting, ESG reporting and sustainable finance frameworks in enhancing corporate transparency in India. The research adopted a secondary data methodology using policy analysis (like SEBI's BRSR) and literature review. The findings indicate that ESG reporting significantly improves accountability, disclosure quality, and governance practices. It also supports better decision-making for investors and stakeholders. However, challenges such as lack of standardization, reporting complexity, and data reliability issues were identified. The study concludes that stronger regulatory frameworks are needed for effective ESG reporting.

Foreign Studies

Bui T & *et al.*, (2020) ^[35] provides a systematic review of Sustainable Corporate Finance (SCF), the main objectives were to examine the current state of SCF research and

identify emerging trends, knowledge gaps, and future research directions. The researchers adopted a systematic literature review using bibliometric analysis, network analysis, and co-word analysis. In this study only 227 English papers were grouped into 6 areas namely, corporate finance in sustainability, sustainable competitive advantages, stakeholder engagement, circular economy, innovation and risk management, and sustainable supply chain ethics and it is rapidly growing and it is key in corporate decision making.

Nosratabadi S & *et al.*, (2020) ^[34] evaluates the sustainability of banking business models in eight European countries by developing a Sustainable Banking Business Model (SBBM) and their importance in achieving sustainability, and compare the sustainability performance. The Delphi Method and analytic hierarchy process were used by 16 experts and data collected from 16 private banks with 147 valid questionnaire collected from bank managers and employees. The study found that value proposition, core competencies, financial aspects, and business processes are the most important components of a sustainable banking business model. And Norwegian and German banks have high sustainability while Italian banks have low.

Rojas M & *et al.*, (2022) ^[43] provides a comprehensive review of the trends in the sustainable finance (SF) literature by combining a systematic literature review by using bibliometric analysis. Using 9,294 publications from the Web of Science (WoS) database, the authors examine the evolution, major research themes, influential journals, and future directions of sustainable finance research. The study finds that research in sustainable finance has grown rapidly, especially after the 2015^[16] Paris Agreement, and identifies five major research clusters that shape the field.

Kashi A & *et al.*, (2023) ^[37] presents a comprehensive bibliometric review of sustainable finance research published in the Scopus database. It uses bibliometric analysis and content analysis to examine the evolution, trends, intellectual, social and conceptual structure, and major research themes in sustainable finance. The study reviewed 723 journal articles published between 2001 and 2021^[8]. The finding shows that leading countries, institutions, journals, authors, and emerging research trends and also highlights that sustainable finance is a rapidly growing interdisciplinary field, with sustainable banking, ESG, green finance, climate finance, and regulation emerging as key research areas.

Zairis G & *et al.*, (2024) ^[28] explains the development of sustainable finance and the role of Environmental, Social, and Governance (ESG) factors in financial decision-making. Using a systematic review of 77 relevant studies and 60 related to Europe, it identifies major research themes, including value creation, green bonds, ESG ratings and performance, and sustainable banking. The study concludes that sustainable finance has become increasingly important but still faces challenges such as inconsistent definitions, fragmented research, and the need for stronger regulatory frameworks and future research.

Fifa Nurafifah Ibrahim (2024) ^[41] explains how sustainable finance is transforming corporate accounting by integrating Environmental, Social, and Governance (ESG) factors into financial reporting and impact of Green bonds on corporate innovation. This method uses Narrative literature review for study and the study finds that growing importance of green bonds, circular economy practices, biodiversity accounting,

and climate-related financial disclosures and also highlights that traditional accounting systems must evolve to support long-term environmental sustainability and stakeholder accountability

Dempere J & *et al.*, (2024) ^[36] examines the problem of greenwashing and its effects the credibility and functioning of sustainable finance. Using a PRISMA analysis, the study analyzes existing research on greenwashing, its causes, impacts, and possible solutions. The study finds that greenwashing reduces investor trust, damages corporate reputation, and weakens the credibility of sustainable finance. It recommends stronger regulations, greater transparency, international cooperation, and improved public awareness to reduce deceptive environmental claims.

Anton C & *et al.*, (2025) ^[40] explores the relationship between risk management, sustainability, and financial performance through a systematic literature review and bibliometric analysis and also to identify key risks, analyze research methods, and understand how it integrating sustainability with risk management affects financial performance. The study reviewed 9,092 Web of Science publications from 2020–2024^[35, 50] using VOSviewer and Tableau Public. The findings reveal that companies adopting effective risk management and sustainable practices generally achieve better financial performance, improved resilience, and long-term value.

Mata M & *et al.*, (2026) ^[38] explores about mapping the knowledge landscape of sustainable finance, analyze the evolution of sustainable finance from 2007–2025^[5] by using bibliometric analysis with the help of tools like citation analysis, co-citation analysis, co-authorship analysis, factorial analysis and network visualisation. The findings show that the sustainable finance has grown significantly with an annual growth rate of 17.05% and highlight that although research in this field has expanded rapidly, there is still a lack of comprehensive analysis of its development and limited empirical evidence on its real environmental impact.

Wang D & *et al.*, (2026) ^[45] examines the evolution of sustainable finance from 1974–2024^[6]. It aims to identify key research themes and trends using a Systematic Literature Review (PRISMA), bibliometric analysis, and BERTopic modeling on 1,256 research articles. The findings show that sustainable finance has evolved through three phases and consists of 12 research themes grouped into three dimensions: Market Mechanisms, Risk Management, and Innovation & Financial Inclusion. The study concludes that sustainable finance has become a mainstream financial approach, driven by ESG, climate policies, and digital innovation.

Roy J & *et al.*, (2025) ^[44] analyze the research trends and relationship between blockchain, sustainable finance, and regenerative finance and identify future research opportunities. It uses bibliometric and thematic review of 78 peer-reviewed articles for the period of 2021–2025^[8, 39] using the PRISMA and PICOS frameworks. Bibliometric analysis was performed with Bibliometrix/Biblioshiny, including co-word, thematic evolution, and factorial correspondence analyses. The findings show that research in this field is growing rapidly, with blockchain and sustainable finance as the main themes, while regenerative finance is an emerging area with strong potential. Blockchain improves transparency, ESG reporting, carbon markets, and financial inclusion, but challenges such as

regulatory uncertainty, environmental concerns, and lack of standardized frameworks remain, highlighting the need for further interdisciplinary research.

Green Finance and Sustainable Economic Development. Indian studies

Soundarrajan P & *et al.*, (2016) ^[7] explains the study of green finance and validate the concept as feasible in the Indian Industries for balancing ecologically depreciation due to assimilation of carbon gases in atmosphere. The findings shows that Green finance is essential for achieving sustainable economic growth and environmental protection and major challenges includes limited awareness ,limited capital ,mispricing ,lack of proper regulations and also highlights implimentation like new initiatives in SBI, IDBI, ICICI, SIDBI, Yes Bank, and Bank of Baroda, which support renewable energy, energy efficiency, and green technologies.

Venkateshaiah M (2018) ^[2] initiates by providing a comprehensive overview of financial landscape, identifying key player, regulatory framework and corporate practices of sustainability in India. The paper analyse the sustainability report of five Indian companies and also highlights that sustainable finance is growing in India ,but stronger polices ,better regulations and greater awareness are needed for long term development.

Jha B & *et al.*, (2019) ^[3] explains the various green financing initiatives taken by the public and private sectors ,trends and challenges by Descriptive method. This study finds that India is expanding the use of green bonds, green banks, debt financing, equity investments, and crowdfunding to support sustainable projects and also highlights challenges such as low investor awareness, high financing costs, weak regulations, financial and technological risks, and an underdeveloped green bond market still exist.

Deshpande R.K (2021) ^[1] examines the recent trends in sustainable finance, focusing on Environmental, Social, and Governance (ESG) finance. It explains how sustainable finance supports long-term economic growth while addressing environmental and social challenges. The paper discusses different forms of green finance, impact investing, stakeholder finance, green bonds, and ESG investments. It concludes that sustainable finance is expanding globally, but better regulations, transparency, and reliable ESG data are needed to improve investment decisions and prevent greenwashing.

Chhaochharia M (2021) ^[19] examines the growth of green finance and the policies supporting sustainable development in India and aims to analyse progress, public awareness and financing mechanisms and identify the challenges. The study uses descriptive and analytical approach. The findings shows that green finance becoming very important in sustainable development strategy and also highlights some challenges like information asymmetry, greenwashing, and high financing costs. The study shows impact after COVID-19 recovery period also offers an opportunity to integrate green finance into long-term economic development.

Rout S & *et al.*, (2021) ^[8] explains the impact, challenges and initiatives for green finance on sustainable banking in India. The findings explains various green finance instruments such as green bonds, green banks, green insurance, and climate finance and also India's current progress, government initiatives, investment trends, and the

major challenges like green washing , technology risk, limited information and policy framework in green finance. The economic growth and destiny of sustainable banking will be strong with the help of stronger policies, better regulatory support, and increased private investment.

Hooda S & *et al.*, (2023) ^[15] systematically literature review aims to examine relationship between ESG ratings, sustainability performance and green finance in aviation insustry and their opportunities and challenges. Sustainable finance is important for making aviation eco-friendly, especially by supporting the use of sustainable aviation fuel (SAF). And also more investment is needed to reduce costs and increase production. Stakeholders must work together with proper standards and incentives, as green finance helps reduce emissions and promote sustainable aviation.

Biju M & *et al.*, (2024) ^[6] examines the various green finance instruments, challenges and influences in India. The research finds that although green finance in India has grown significantly in recent years, the country still faces major challenges, including high financing costs, limited awareness, investment risks, weak regulatory policies, lack of standardized reporting, and an insufficient number of bankable green projects.

Shiva K & *et al.*, (2025) explains the significance and role of green finance in Indian SMEs and key initiavtives by SIDBI,RBI and the Government of SMEs by using SIDBI reports ,RBI publication and journals. The findings shows that the green finance helps SMEs adopt cleaner technologies, enchance resource efficiency and reduce carbon emission and the combined efforts of SIDBI, RBI and Government of India supported with avrious intitatives for promoting sustainability towards green economy.

Biswas D (2025) ^[5] investigate the several aspects ,trends and numerous governmental and private green finance efforts of green finance that contributes to achieving sustainability objectives by using descriptive method. Green finance has emerged as an important solution by funding environmentally friendly projects like renewable energy, green buildings, energy efficiency, and waste management. The paper highlights India's efforts to achieve net-zero emissions by 2070 through green finance initiatives led by the government, RBI, banks, and financial.

Gupta D & *et al.*, (2025) ^[21] examines that green finance in India has grown significantly through instruments such as green bonds, green deposits, and sustainability-linked loans, supported by initiatives of the RBI and SEBI. However, challenges such as the absence of a unified green taxonomy, greenwashing risks, high financing costs, limited investor awareness, and regulatory fragmentation continue to hinder growth. The study concludes that stronger policy coordination, innovative financing mechanisms, enhanced ESG disclosures, fintech-based solutions, and greater public-private collaboration are essential to accelerate India's transition toward a sustainable green economy

Kumar A & *et al.*, (2024) ^[13] examines about current status of green finance and its regulatory framework and also how green finance influences carbon emission intensity (CEI) in China. This papere uses biblometrics method, vos viewer, content analyis and BART analysis (30 Chinese provinces (2000-2022)) and also uses climate physical risk index (CPRI). It finds that green finance significantly reduces carbon emissions after reaching a certain development level, while climate risk does not show a statistically significant impact and also highlights areas differences and emphasizes

the usefulness of machine learning techniques in environmental regulation policy evaluation.

Foreign Studies

Ikevuje A & *et al.*, (2024) ^[29] examines the important of sustainable finance in green energy transition and it also aims to understand sustainable finance mechanisms, such as green bonds, green loans, investment funds, and ESG-based investments, promote renewable energy development and contribute to environmental sustainability. The research adopts a systematic literature review and content analysis, using peer-reviewed journals, industry reports, policy documents, and international publications from 2013–2024^[41]. The findings Sustainable finance plays a vital role in promoting renewable energy and sustainable economic development. However, challenges such as regulatory uncertainty, limited access to finance, and the lack of standardized ESG criteria remains key challenges.

Wu J (2024) examines how green finance and carbon accounting contribute to sustainable development particularly in China. The study uses Quantitative research methods like econometric analysis, on manufacturing listed companies of Shanghai Stock Exchange.

Quan a Fu (2024) examines the impact of green finance on corporate debt financing among Chinese listed companies between 2008 and 2020^[22]. By using fixed effects regression model, heterogeneity analysis, mediation effect analysis and robustness tests. The study finds that green finance significantly reduces corporate debt financing by easing financing constraints and improving executive compensation. The impact is stronger for state-owned enterprises, firms in less marketized regions, areas with better industrial structures, and regions with lower carbon emissions.

Carbon Accounting and Climate Reporting:

Foreign Studies

Gulluscio C & *et al.*, (2020) ^[32] explains main objective is to map the conceptual structure and evolution of climate changes related accounting, its current state and to fill the research gaps and it uses systematic literature review using bibliometric techniques of articles published between 1995 to 2024^[28]. The study finds that environmental accounting grow rapidly since 2022^[17] and there are 4 major themes identified and enhance transparency, accountability, regulatory framework and sustainable decision making.

Marlowe J & *et al.*, (2021) ^[26] systematically studied 27 research papers on carbon accounting to examine its current state of practices, to assess transparency, reliability, comparability, challenges, and future research needs. The study finds that carbon accounting is essential for measuring greenhouse gas (GHG) emissions and supporting climate action, but current authorities were lack transparency, reliability, and comparability. The study also highlights the need for standardized reporting frameworks and involvement of the professional accountants.

Kenyon C & *et al.*, (2022) ^[42] explain that a new Carbon Equivalence Principle (CEP) to improve transparency in sustainable finance. The principle requires every financial product to disclose not only its cash flows but also the carbon emissions (or carbon sequestration) it enables. The study demonstrates that incorporating carbon information into financial products helps financial institutions assess climate-related risks more accurately. Using power

generation projects as examples, the article show that carbon pricing significantly affects project costs, financing decisions, and investment risks.

Green Accounting Practices and Environmental Disclosure

Indian Studies

Chinmay Gaurangbhai Modi (2015) ^[16] examines the evolution of Green Accounting in India up to December 2015^[16], explores key developments, implementations, challenges, stakeholder roles, and the importance of valuing environmental resources to support sustainable economic growth.

Kolge S & *et al.*, (2024) explains that Green Accounting integrates environmental costs with financial reporting to support sustainable development and responsible business practices. It also examines its importance, objectives, regulatory framework in India, benefits, challenges, and case studies of Infosys and ITC using a conceptual literature review. The study finds that Green Accounting improves transparency, profitability, decision-making, and investor confidence while promoting environmental sustainability and also highlights challenges such as high implementation costs, lack of standardized data, and limited awareness hinder its widespread adoption.

Tiwari A & *et al.*, (2026) ^[18] explains the concept of green accounting and its growing importance in India and also highlights how green accounting integrates environmental costs into financial reporting, helping businesses and governments balance economic growth with environmental sustainability. The study discusses the objectives, types, benefits, challenges, and current green accounting practices in India, emphasizing the need for greater standardization and awareness.

Foreign Studies

Dhar B & *et al.*, (2020) ^[46] examines the impact of Green accounting on sustainable development high level polluting companies in Bangladesh and also role of CSR disclosure among 212 listed companies under Dhaka stock exchange. Using data from 2010-2019, the researcher employed a quantitative research design by using statistical tools to test relationships among the variables. The study finds that green accounting significantly improves sustainable development, while CSR disclosure further strengthens this positive relationship.

Sundarasan S & *et al.*, (2024) ^[30] examine the publication, identify major research themes and explore practical implication of environmental accounting. It presents a meta-synthesis review based research using bibliometric analysis of publication between 1995 to 2024^[28] and examines 62 articles on this study. The findings were environmental accounting has become an essential tool for promoting sustainability, improving transparency, and supporting corporate financial decision-making and also identifies future research opportunities in areas such as carbon accounting, AI, and sustainability reporting.

Sklavos G & *et al.*, (2025) ^[49] evaluates sustainability performance (eco-efficiency and ESG practices), of 365 European financial institutions by using a two stage methodology framework, first one DEA (Data Envelopment Analysis) and second one CRITIC-TOPICS and other methods Correlation analysis and Robustness test. The study finds that only 38% institutions are fully eco-efficient and

most are inefficient. Governance factors like board oversight and transparency matter more than environmental metrics alone. There is only a moderate link between efficiency and ESG performance, meaning good ESG scores don't always reflect real performance, suggesting possible greenwashing. The ESG ranking method used is reliable and produces stable results.

Abdurazzok A & *et al.*, (2025) ^[47] compares the implementation of Green Accounting and Environmental, Social, and Governance (ESG) practices in Uzbekistan and Indonesia. It evaluates that both countries integrate sustainability in their economic and corporate governance. Indonesia has more advanced ESG framework with proper regulatories but Uzbekistan is still developing its ESG standards through various initiatives and there are many Industry 4.0 technologies such many AI, IoT and block chain which can improve ESG transparency and accountability.

Environmental Social and Governance: Indian Studies

Arora A *et al.*, (2022) ^[17] examines ESG performance scores reduce the cost of debt for Indian firms listed on the 260 NIFTY500 companies between 2015 and 2020^[16, 22] by using Bloomberg data and panel regression analysis. The study finds that firms with higher ESG scores generally experience a lower cost of debt. The relationship is strongest for the social and governance dimensions, highlighting the financial benefits of better ESG disclosure and sustainability practices.

Kavya Agarwal (2024) examined it aims to analyse the current status of ESG (Environment, social and governance) integration in India. It mainly focuses on the gaps in ESG regulations and the overlapping (similar) roles of the National Green Tribunal (NGT) and the National Company Law Tribunal (NCLT). The study uses qualitative analysis of laws, case studies, and company practices to understand the existing situation. It finds that although ESG adoption is increasing in India, the current framework is not clearly organized. Major challenges include unclear responsibilities between the tribunals, inconsistent ESG data, and the risk of companies making false sustainability claims (greenwashing). The study suggests that introducing clear ESG laws, improving proper coordination between the National Green Tribunal (NGT) and National Company Law Tribunal (NCLT), and increasing awareness among businesses and stakeholders to support sustainable and responsible business practices.

Dwibedi P & *et al.*, (2024) ^[12] examines impact of ESG scores influences on the financial and market performances of NSE 500 Companies in India for a period of 2010-2021^[8] by using Generalized Method of Moments (GMM). The study finds that the ESG scores have significant negative short-term impact but positive quadratic effect on firm performance and also highlights that lack of conclusive evidence on the relationship between ESG performance and firm performance in the Indian context.

Amin U & *et al.*, (2025) ^[10] evaluate the impact of renewable energy initiatives on advancing sustainable development and reviews ESG practices contribute to sustainable finance and renewable energy development by using Systematic Literature Review approach. The study finds that ESG in renewable energy is still incomplete and doesn't properly compare different sectors like solar, wind,

and hydro. It also doesn't clearly show how it helps poor communities or improves equal access to energy. New technologies and long-term funding ideas are under explored and real-world problems are ignored.

Shukla A & *et al.*, (2026) ^[18] examined how ESG factors are integrated into corporate practices in India and how they influence on financial performances. This study used secondary data, ESG ratings and financial statements of 10 companies for 5 years by using descriptive statistics, spearman rank correlation, Mann Whitney U test and longitudinal trends. The study found that Indian companies with strong ESG (Environmental, Social, and Governance) practices perform better financially than companies with weak ESG practices. Companies with high ESG scores earn higher profits, achieve better returns on their investments, and pay lower borrowing costs. The IT and banking sectors benefit the most from ESG adoption, while industries that require heavy investment face higher initial costs but gain greater long-term benefits. The study also explains that companies may see lower profits at the beginning because of ESG investments, but these investments lead to better financial performance over time.

Singh S & *et al.*, (2026) ^[11] explains the development of sustainable finance in India and main focus on ESG investment, instruments, regulatory policies, and implementation challenges. It also explains how sustainable finance supports economic growth while addressing environmental and social concerns. The findings shows that India has made significant progress through green bonds, ESG mutual funds, sustainability-linked loans, and supportive government policies, issues such as inconsistent ESG standards, greenwashing, limited awareness, and financing gaps continue to hinder wider adoption.

Moanoranjana Panda (2026) ^[9] evaluates the impact of ESG reporting on Firm value and how ESG reports affects shareholder value in India by using Systematic Literature Review by analysing 84 papers for the period of 2000 - 2025^[10]. The findings shows that CSR become compulsory under companies act 2013 and whereas high quality ESG reporting under SEBI's BRSR framework improved transparency, investor confidence and firm valuation and also highlights long-term shareholder value when supported by strong governance and quality disclosure, even though further research is needed on BRSR, investor behavior, and ESG ratings.

Foreign Studies

Friede G & *et al.*, (2015) examines the relationship between Environmental, Social, and Governance (ESG) practices and Corporate Financial Performance (CFP) by reviewing more than 2,200 empirical studies from the 1970s to 2014. Using both vote-count studies and second-order meta-analysis, the authors conclude that ESG investing generally has a positive impact on financial performance. Around 90% of the studies report either positive or neutral relationships, with most showing positive results. The findings tells that ESG performance contributes to long-term business value creation.

Aldowaihi A *et al.*, (2022) ^[33] examines to understand the relationship between ESG and business models and distinguish ESG integration as a process and as an outcome. The study used the SALSA (Search, Appraisal, Synthesis, and Analysis) framework and reviewed 29 research articles, the data were analyzed using the Input-Process-Output

model and MAXQDA 2020^[22] software. The findings of the study were out of 29 studies, 27 studies discussed ESG integration mainly as an outcome, while only 2 studies explained the actual integration process and also the firms mainly adopt ESG due to stakeholder and government pressure. The study concludes that more practical research is needed to help organizations achieve long-term sustainability and improved financial performance.

Kong Y & *et al.*, (2023) ^[27] explains the impact of ESG performance on firm value of pharmaceutical companies in developing and least developed countries and it also investigates role of technological innovation. This study uses quantitative research method for a sample of 78 pharmaceutical companies from central and southern Africa and purposive sampling for study from 2009-2022 data and analytical tools like generalized method of moments (GMM) and Pooled Mean Group (PMG) using Stata 17.0. The study show that environmental and social performance positively influence firm value, while governance performance has no significant effect. Technological innovation enhances the positive impact of environmental and social performance on firm value.

Fatih Kansoy (2025) ^[39] examines that how ESG characteristics influence the transmission of monetary policy to firms and compare the effect of target surprises and path surprises. The authors analyze how firms with different ESG scores react to Federal Reserve policy announcements. The study also highlights the role of the 2015 ^[16] Paris Climate Agreement in changing the relationship between ESG and monetary policy.

Discussion

The above systematic review shows that both Indian and foreign studies recognize sustainable finance as a important driver of sustainable development, corporate transparency, and responsible investment. Indian studies mainly focus on green finance initiatives, ESG adoption, regulatory frameworks, and implementation challenges, whereas foreign studies includes advanced research methods, global trends, sustainable banking, carbon accounting, climate finance, and financial innovation.

The major highlights of the study is Indian studies are largely descriptive and policy-oriented, with less empirical evidence and integrated analysis of sustainable finance, ESG, green accounting, and carbon accounting. In foreign studies they use empirical and systematic approaches but are mostly based on developed countries and their findings less related Indian context. Therefore, an integrated, empirical, and specific research is needed to evaluate the long-term financial and environmental impact of sustainable finance practices in India.

Recent trends in sustainable finance shows adoption of green bonds, ESG reporting, sustainable banking practices, and digital innovations such as blockchain and artificial intelligence and also new initiatives, including RBI and SEBI regulations, the BRSR framework in India, and international sustainability frameworks which gives strength to sustainability reporting and corporate accountability. The major challenges such as greenwashing, lack of standardized reporting frameworks, high implementation costs, financing constraints, limited awareness, inconsistent ESG data, and regulatory fragmentation continue to hinder effective implementation.

Conclusion

This review shows that sustainable finance is becoming more important for protecting the environment, supporting responsible business, and achieving long-term economic growth. Indian studies mainly focus on government policies, green finance, and ESG implementation, while foreign studies use advanced research methods and cover areas such as climate finance, sustainable banking, and carbon accounting. Both Indian and foreign studies identify common challenges like greenwashing, lack of standard reporting, limited awareness, and regulatory issues. Overall, the review explains that more practical and evidence-based research is needed, to better understand how sustainable finance can improve both business performance and environmental sustainability in the long run.

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