

Environmental Consciousness Corporations: Systematic Literature Review From Indian Context

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Abstract: This study provides a bibliometric analysis of Environmental, Social, and Governance (ESG) research in India. The articles which are indexed in Scopus data are selected for review. The analysis highlights the increasing focus on sustainability reporting, corporate governance, and socially responsible investing, with a marked shift towards India's role in global ESG discussions. The findings reveal that leading authors, such as Sharma D and Gupta S, are driving research productivity, while scholars like Rajesh R and Haq A.N influence the field through highly cited work. Journals like the Australasian Accounting, Business and Finance Journal and the Journal of Cleaner Production play a central role in disseminating ESG research, reflecting the growing academic interest in sustainability practices. Additionally, institutions such as the University of Delhi and Symbiosis International are identified as key contributors to the Indian ESG research ecosystem. The study also uncovers evolving keywords and themes, emphasizing the increasing relevance of climate change, corporate social responsibility, and governance approaches in shaping ESG discourse. This research offers valuable insights for future studies exploring the intersection of ESG with emerging markets, sustainable finance, and corporate governance.

Keywords: Environmental, Social, Governance, Non-Financial Disclosures, Paradigm Shift, ESG.

1. INTRODUCTION

Firms have to address issues of disclosure for a long time. The access to information of organization is critical for shareholders & stakeholders to take quality capital budgeting decisions and avert any forthcoming hazard in our economies (Alareeni & Hamdan, 2020). Alareeni & Hamdan, (2020) cited Demise, (2006) which stated that a greater transparency can help to recruit money and preserve market confidence. A low level of disclosure and an unclear picture of organisations, on the other hand, can lead to market volatility, unethical behaviour, and integrity of market gets damage at a high cost to enterprises, stakeholders, and the country. The analysis of financial statements serves the purpose of determining the relevant components for investment decisions (Ou & Penman, 1989). However financial statements of companies are gradually getting a back seat when the performance of companies are considered for investment, since post 20th century, nations have faced various corporate scams and crises, US global crises 2008 was one of them (Alareeni & Hamdan, 2020) which had its contagion effects on all over the world. As proven by Enron, WorldCom, and Satyam, corporate financial crimes appears to be a major concern that is growing in both occurrence and intensity (Bhasin, 2013). According to studies, an increase in the frequency of accounting records forgeries has impacted the credibility of financial records, resulted in considerable financial damage from market volatility, and diminished shareholders' belief in the usability and trustworthiness of financial information (Bhasin, 2013). The need for new alternatives to judge corporate performance has arisen as a result of window dressing with public financial disclosure and losing trust on financial statements therefore Wagemans et al., (2013) highlighted that during the previous couple of years, non-financial variables are now being considered by a growing number of shareholders. As per Atan et al., (2018) ESG factors, or environmental, social, and governance variables, are a terminology used in the financial markets to indicate corporation's non-financial achievement. Companies status related to these non-financial variables are published in sustainability report (Buallay et al., 2020). Environmental, social, and governance (ESG) practises of businesses create a new accountability metric that reflects a conscious devotion to non-financial objectives also companies engaged in and report their ESG practises to gain from their financial and strategic benefits by establishing non-financial aims under ESG activities (Arayssi et al., 2020).

Atan et al., (2018) describe that natural environment conservation, global warming, and environmental repercussions emerging from a corporate activity are some of the environmental concerns for investors and stakeholders. Human rights, equality, workplace diversity, and contribution to society are all essential social aspects to stakeholders. Shareholding, board composition, appropriate shareholders' rights, minority investor protection, openness, and disclosure of business information are among the governance concerns. The growing concern of ESG from both investors and corporation's side & its significance has prompted a lot of academics to formulate hypotheses and carry out empirical research (Buallay et al., 2020) moreover there is a large and substantial literature devoted to ESG research (Ouchen, 2021). Knowledge development in this field of study is accelerating at a dizzying pace while remaining fragmented and diverse. This makes it hard to keep up with the state-of-the-art and sit on the forefront of existing literature. As a result, conducting a literature review is more crucial than ever as a research strategy (Snyder, 2019).

Therefore, with the help of Systematic literature review methodology this study aims to put forward an overview of research being conducted in ESG area specifically from Indian context. Following are the research questions that this study aims to answer:

RQ1. How the ESG Literature evolve over the period in India?

RQ2. Who are the major contributors and contributions in ESG Literature in India?

RQ3. What are the major emerging themes in ESG Literature in India?

RQ4. What are the major variables used in the ESG literature in India?

RQ5. What are the potential future research questions for further development in ESG Literature.

The remainder of this paper is organized as follows. Section 2 presents materials & methods. ESG evolution and research growth in Section 3 Results of bibliometric analysis are populated in Section 4. Section 5 conclude the study.

2. MATERIALS AND METHODS

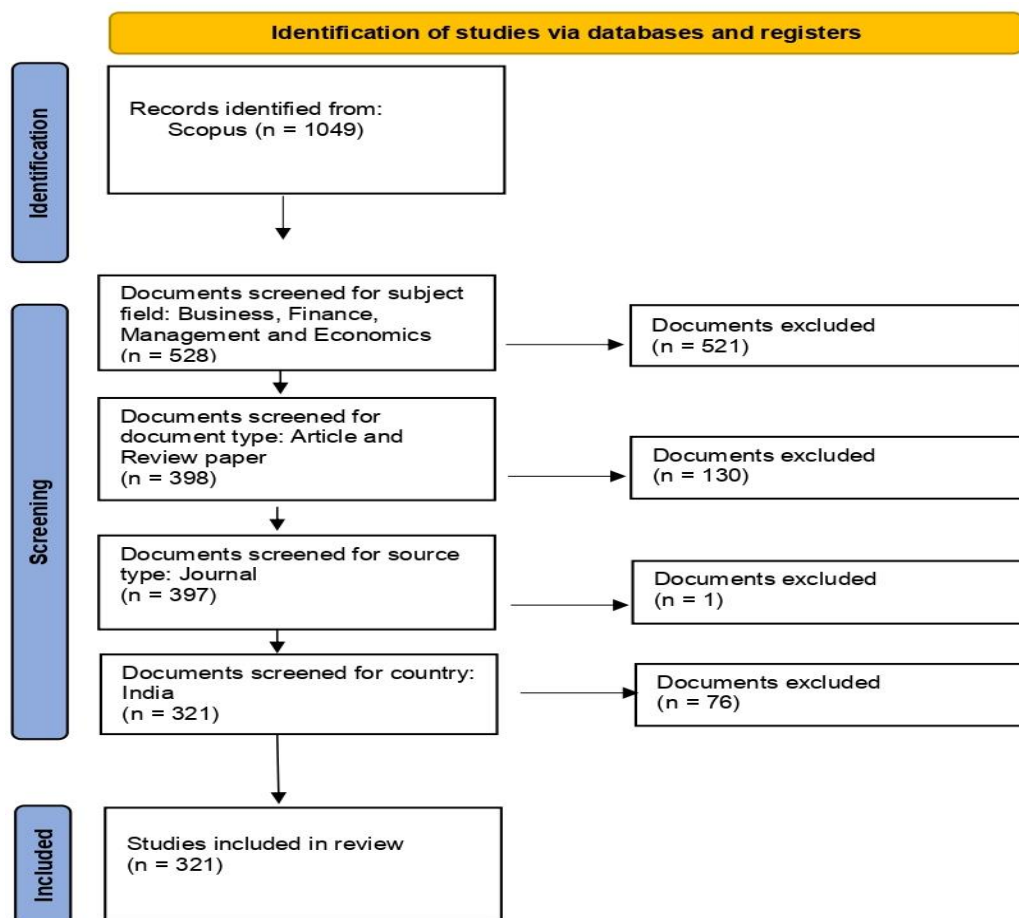


Figure 1: PRISMA Framework for article selection

This study adopted the systematic process of searching for articles based on the PRISMA framework (Figure 1). The search was carried out on an internationally recognised abstraction & citation database,

which includes Scopus. “ESG”, “Environmental”, “Social”, “Governance” were the keywords for the search of relevant research articles, and these keywords were searched in the field of “Title, Abstract and Keywords” in both databases. The search was refined to the papers published in the subject areas “Business”, “Management”, “Accounting”, “Finance”, “Economics” and “Econometrics” only. A separate search for “Environmental” or “Social” or “Governance” was not conducted since papers which have worked on all three variables come under the remit of this study. Since the study has focused the review in the Indian context, the results were further refined to the country “India” only. The article's inclusion and exclusion process is presented in the PRISMA framework in Figure 1.

This study adopted the quantitative version of the systematic review, which is also called a bibliometric review. There are several studies that have used this technique. This technique has several benefits, such as capturing a large amount of data in the review; it not only retrieves the themes but also creates a network among themes and gives the performance of various players in the field. R software and VosViewer are used for the analysis.

3. BACKGROUND OF ESG

3.1 EGS Evolution

ESG refers to the environmental, social, and governance elements that are used to assess a company's long-term viability (Huang; & Watson, 2015; P. Sharma et al., 2020; Tripathi & Bhandari, 2014). Emissions, water use, water contamination, and the use of renewable and non-renewable resources are all environmental factors, social considerations include issues like as workplace diversity, workplace safety, labour disputes, child slavery, and the influence of processes on the community or society, all concerns relating to management and board of directors are covered under governance, including board characteristics, meetings of the board, punctuality, topic concerns, and misconduct (P. Sharma et al., 2020). Gao et al., (2021) highlighted that the roots of the ESG lies in the concept of social responsible investment (SRI). SRI refers to investments that combine "conventional financial perspectives with a perspective inspired by and geared toward social and environmental issues"(Michelson et al., 2004; Sciarelli et al., 2021). The term "social investment" first appeared in the 1960s and 1970s & Schueth, (2003) study described that SRI originated during the 1960s political atmosphere, as socially conscious investors became more concerned with issues affecting women and minorities. During 1970, various moments have raged in US such as anti-Vietnam war movement, individual rights movement, movement related to women's rights these issues foment the sentiments of public on social justice, movements of such type paved the way for inclusion of social responsibility and accountability of business in financial and non-financial matters (Camilleri, 2020). With the help of legitimacy theory Dowling & Pfeffer, (1975) stated that demonstration of social values by the organisation should be in congruent with the societal norms for their acceptance in society. Profit maximisation cannot be the exclusive purpose of enterprise in the twenty-first century, especially in situations where global climate change is escalating and socioeconomic disparity is widening. Rather the only business that would be able to earn and maximise its profits in long term is the one which would actively consider People, Planet and Profits (3Ps) (Zehir & Aybars, 2020). John Ellington was the first person who coined this 3Ps approach. Elkington, (2018) have disagreed with the Friedman, (1970) opinion that business' only social responsibility should be profit maximisation (Bodhanwala & Bodhanwala, 2018). Elkington, (2018) opined that a business profit or loss status is not only the appropriate measure to put it in good or bad books rather its impact on environment and society should also be considered since there is no good in maximization of profits on the cost of environmental degradation and societal inequalities. The main motivational considerations were global warming and widening inequality. Global warming has shown an upward trend from past few decades and the main reason behind it the burning of uneven and excessive fossil fuels; industrial revolution has a big contribution in it. Due to this rising global temperature, climate is disrupting and gradually becoming unhealthy to live in. The emission that arises as a result of the combustion of fossil fuels accounts for 80% of all human-caused emissions (Boden et al., 2010). Most of the investors have initiated to mull over on environmental aspects in their investment decision following Bhopal, Chernobyl and Exxon Valdez, Nike, Parmalat etc. Incidents (Camilleri, 2020; Sciarelli et al., 2021). Along with Environmental and social issues, world had encountered with corporate governance issues which led to the massive crises such as Enron, WorldCom, Satyam etc. (Bhasin, 2013). As a result of historical events, these problems have become increasingly important in the investment objectives of politically involved people (Eccles et al., 2020).

The term "environmental, social, and corporate governance" (ESG) was first used in the UN Global Compact study *Who Cares Wins: Connecting Financial Markets to a Changing World*, published in 2004, in which the defunct United Nations called for a joint collaboration of financial institutions "to establish guidelines and recommendations on how to effectively incorporate environmental, social, and corporate governance issues in wealth management, securities, and other financial markets" (Eccles et al., 2020; Lokuwaduge & Heenetigala, 2016; Lydenberg, 2014). This event has inflicted the surge of industry of ESG data vendors in short span of time since. Next, the UN Principles of Responsible Investment (UN-PRI) were formally established in 2006 and introduced the ESG framework and mentioned some of the most obvious variables one should take into account (Gao et al., 2021). When analysing a company's performance, the UN-PRI encouraged investors to include environmental, social, and governance (ESG) factors (Atan et al., 2018; Caplan et al., 2013). In order to solve the issue of corporate sustainability, i.e. to prompt businesses to be more responsible due to non-financial motives, by disclosing their environmental, social, and corporate governance-related risks publicly. Various standards, codes, and frameworks established by governments, regulators, and provincial governments all over the world with different designations have been developed in order to help businesses fulfill the ESG (Environmental, Social, and Governance) reporting norm, Sustainability Reporting Standards (GRI), UN global compact guideline and SDGs (Sustainable Development Goals), UN Principle of Responsible Investing (UNPRI), International Integrated Reporting Council (IIRC) framework, Task Force on Climate-Related Financial Disclosures (TCFD). In march 2021 India's SEBI has also mandated to top 1000 listed Companies (by market capitalization) in India to disclose "Business responsibility and sustainability report" still ESG is at infant stage in India (SEBI, 2021).

3.2 ESG from Global Lens

Investors have started integrating their personal values with investment values (Camilleri, 2020) & UN's promotion of ESG incorporation in investment, events and scenarios like these have encouraged industry and academic research fraternity to explore the ESG in depth. According to the United Nations Global Compact (2017), almost 9,000 enterprises and 4,000 non-profit organisations from 161 nations have made meaningful commitments to address social challenges, including efforts to improve environmental, social, and governance (ESG) performance (Harjoto & Wang, 2020). The evidence of same can be seen in a study conduct by Chauhan & Kumar, (2018) that whether investors value non-financial disclosure in their investment decision in emerging markets. Chauhan & Kumar, (2018) results pointed toward positive relation between non-financial disclosure and the market value of the firm. A similar kind of study was conduct by Wong et al., (2021) to check whether a certification of ESG show any impact on the value of firm, a sample of Malaysian list companies was considered and ESG ratings, authors have concluded that allocation of ESG ratings have positive impact on firm value and negative impact on its overall cost of capital. There are still some developing countries where ESG information is given a second priority and the financial information is at first to examine for example Khemir, (2019) have interviewed the mainstream investors and financial professional of Tunisia, the results of their study was that ESG criteria are given secondary importance than financial information. It's not only Tunisia, in fact a global survey was conduct by Amir & Serafeim, (2018), these scholars surveyed mainstream investors from all over the globe, their study sample has majority of Europe and US respondents, Asian respondents counts was little higher then rest of the continents, their research results concluded that mainstream investors never prefer ESG over financial performance, it means that they never consider all factors of ESG in every investment rather the material information is given preference that too fluctuate with change in industry and economy. In the same line of materiality of ESG information Broadstock et al., (2021) opined that only is governance factor is most and equally important in all industries, materiality of environmental and social factors information tend to vary sector wise. Good representatives from developed countries, United States also have some studies which reflect that they are far ahead in the research of sustainability. Research conducted by Qureshi et al., (2021) is one example in which scholars had intended to show the relationship between ESG and the superior financial returns of 100 best corporate citizens. The findings of their study imply that if businesses commit to nature conservation, the market acknowledges their efforts, thereby initiating and maintaining a "virtuous cycle" of green investments and "shared value" generation. Alareeni & Hamdan, (2020) have found that US S&P 500 Listed firms' ESG disclosures have positive impact on financial performance of firms'. Banks are generally considered as the lifeline of an economy therefore their non-financial disclosure's impact pertain high significance to be researched so Shakil et al., (2019) had tried to cover this lacuna by conducting a research on banks across emerging

markets. Shakil et al., (2019) have researched the impact of non-financial performance on financial performance of banks of 93 emerging markets and concluded that banks' financial performance have positive relation with environmental and social performance but does not have any relation with governance performance of banks. With similar kind of intention Buallay et al., (2020) studied 59 banks which were listed in MENA region and examine whether ESG impact the performance of banks or not, their studies finding concluded that non-financial disclosure of ESG have inverse effect on value of banks.

4. RESULTS

4.1 Descriptive Statistics

Table 1 shows that a total of 321 articles were published across 142 sources by 713 authors from 2004 to 2025. The publication has an annual growth rate of 22.59%, indicating a significant increase in research output over the years. On average, each document received 15.29 citations, highlighting the scholarly impact of these studies. Additionally, the total number of references cited within these articles amounts to 18056. Among the published documents, 30 articles were authored by single authors, while the remaining articles involved multiple authors. Furthermore, 29.9% of the publications featured international co-authorships, reflecting a collaborative approach in the research community.

Table 1: Descriptive Statistics of Data

Description	Results
Main Information about Data	
Timespan	2004:2025
Sources (Journals, Books, etc)	142
Documents	321
Annual Growth Rate %	22.59
Document Average Age	2.27
Average citations per doc	15.29
References	18056
Document Contents	
Keywords Plus (ID)	347
Author's Keywords (DE)	1045
Authors	
Authors	713
Authors of single-authored docs	27
Authors Collaboration	
Single-authored docs	30
Co-Authors per Doc	2.99
International co-authorships %	17.13
Document Types	
Article	311
Review	10

4.2 Annual Scientific Production

The figure 2 illustrates the annual scientific production of research papers in India over the years. Notably, the number of articles published remained relatively low and stable from 2000 to 2018, with a slight increase in the early 2010s. However, from 2019 onwards, there is a sharp spike in scientific output, peaking in 2024. This dramatic rise suggests a significant increase in research activity, possibly influenced by factors such as greater funding, collaboration, or institutional support for scientific research. The sharp decline post-2024 might indicate an early projection or data anomaly.

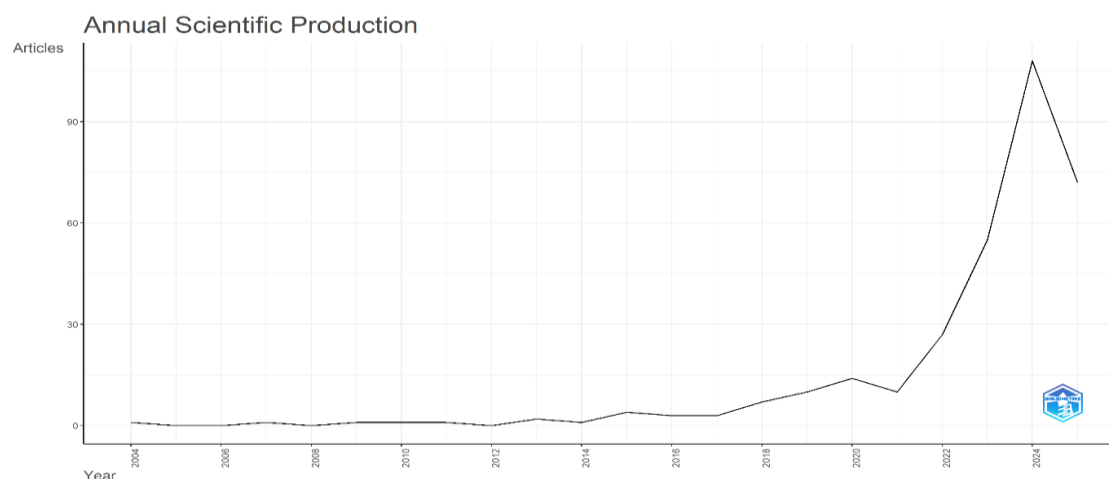


Figure 2: Annual Production on ESG Literature in India

4.3 Leading Authors

The author analysis provides a clear distinction between the most productive and influential researchers in the field. The figure 3, highlighting the most relevant authors, shows that Sharma D is the leading author with 11 documents, followed by Gupta S and Kumar S, each with 9 and 8 publications, respectively. This suggests that these authors are prolific in contributing to the research literature on the subject. The figure 4, measuring the local impact of authors by the TC index, reveals that Rajesh R stands out with the highest impact, scoring 301, followed by Haq A.N, Kannan D, and Mathivathanan D, each with 220 citations. This demonstrates that while some authors may produce numerous publications, the impact of their work, as indicated by citation counts, varies significantly. Authors like Rajesh R and Haq A.N have a strong influence in the academic community, with their works being widely cited.

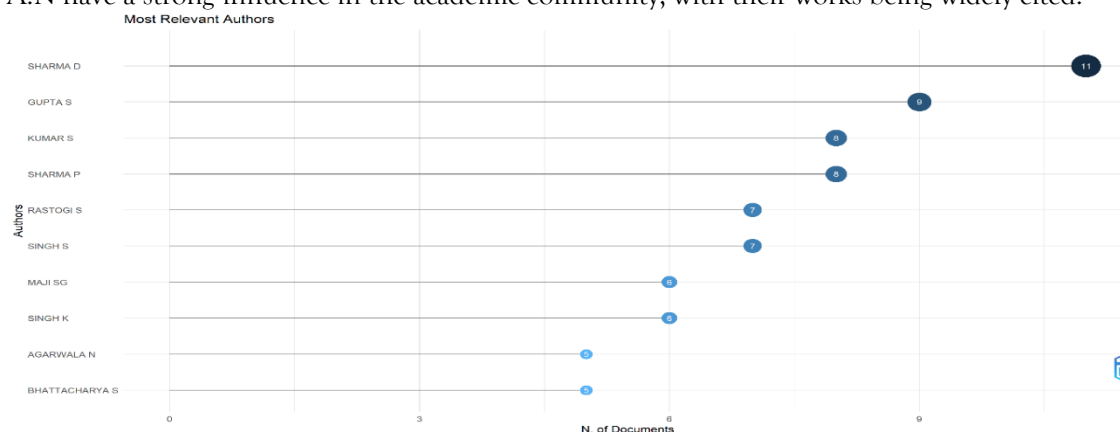


Figure 3: Top 10 most productive authors

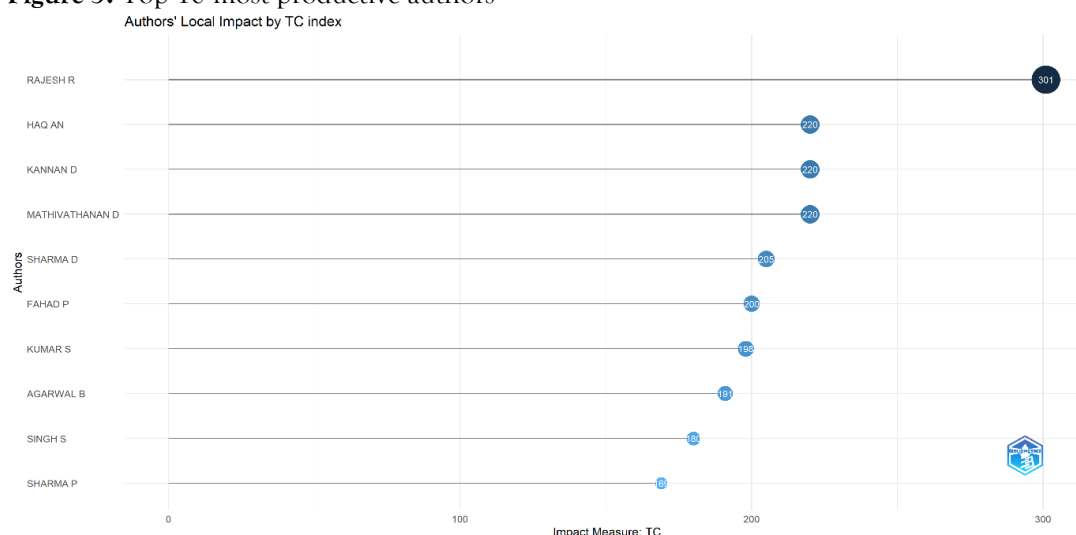


Figure 4: Top 10 most cited authors

4.4 Leading Journals

The journal analysis reveals key insights into the most relevant sources and their impact. The figure 5 highlights the most relevant sources, with Australasian Accounting, Business and Finance Journal leading the list with 13 documents, followed by journals like Environment, Development and Sustainability and Investment Management and Financial Innovations, each with 9 documents. These sources are prominent in terms of research production. In the figure 6, which shows the local impact by TC index, Journal of Cleaner Production has the highest local impact, with a significant 494 TC score, indicating its wide influence within the field. Other influential sources, such as Resources, Conservation and Recycling and International Journal of Disclosure and Governance, follow closely with high TC scores of 292 and 268, respectively. These figures suggest that while many journals are prolific in terms of publication volume, their impact, as measured by citation counts, varies, with certain journals having a far-reaching influence on the academic community.

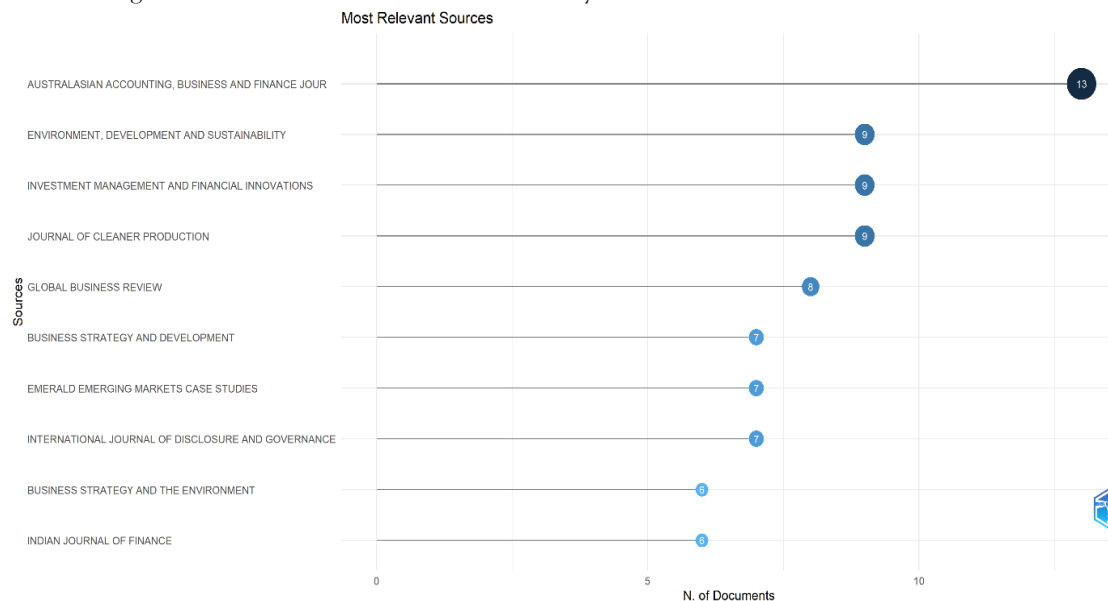


Figure 5: Top 10 most productive journals

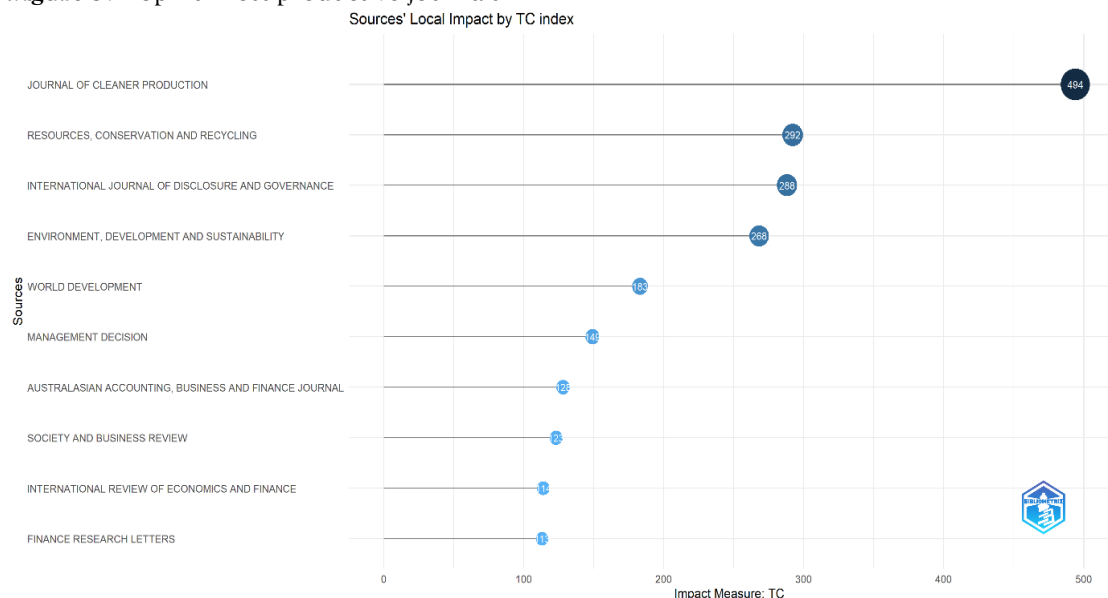


Figure 6: Top 10 most cited journals

4.5 Leading Institutions

The figure 7 highlights the most productive institutions based on the number of articles published. University of Delhi emerges as the leading institution with 26 articles, followed by Symbiosis International (Deemed University) with 18 articles. Indian Institute of Management and Amity University both have 16 articles, while Vidyasagar University and Tezpur University each contributed 15 articles. These institutions are the primary contributors to the research output in the field, reflecting their strong involvement in academic research and publication. Their significant productivity demonstrates the role

these universities play in advancing knowledge in their respective areas.

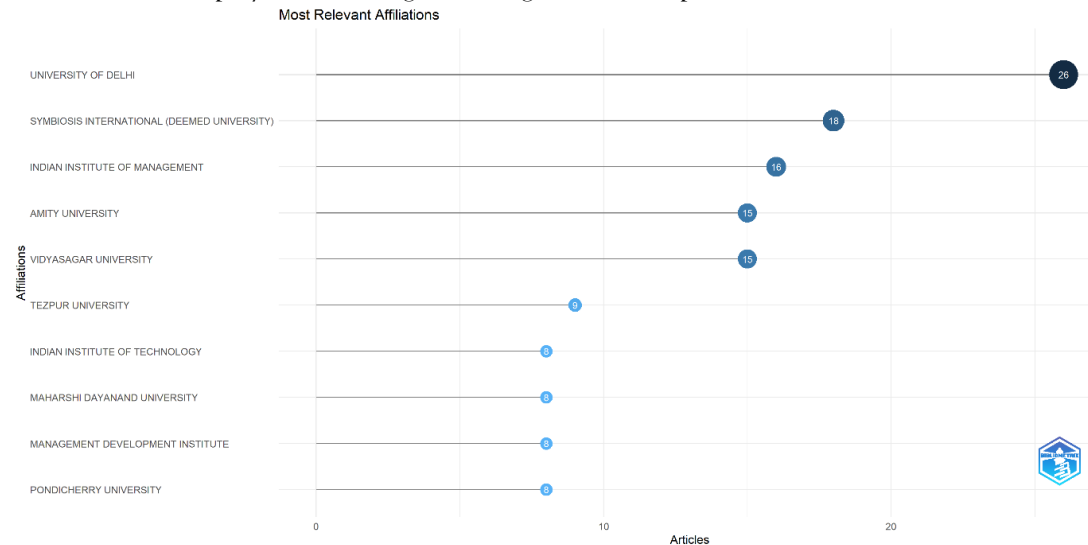


Figure 7: Top 10 most productive institutions

4.6 Top 10 locally cited papers

Table 2 presents the most cited papers in the sample data of research documents. It was observed that integration of sustainability factors is gaining top priority among investors and corporations. Developed countries are already ahead in this race it is now the high time for developing nations to look into it. This section would take the readers to the studies that have been conducted in Indian context or published in India related to business sustainability. Bodhanwala & Bodhanwala, (2018) studied the impact of corporate governance on firms profitability, for which their study took sample of 58 Indian firms and concluded that firms which are ranked high on ESG are have better profitability than those ranked low. Their research also showed that high sustainable companies have low leverage which indicates that they have better access to capital markets. Chauhan & Kumar, (2018) investigated the impact of sustainability disclosure on firm value. After analysis of 630 firms for period 2007-2016, their study demonstrated that companies ESG score is directly related with the value of the firm though the valuation of the firms were varying due their affiliations, majority of the business group firms showed weak relation between ESG score and value of firm which is in contract with standalone firms where the positive and strong relation was encountered. P. Sharma et al., (2020) have used content analysis to examine the impact of the extent of ESG disclosure on firm performance. Their study have used a unique approach for measuring non-financial disclosure, rather going for international database for ESG scores, scholars have prepared ESG index as per the Global reporting Initiatives (GRI) framework and Clause 49 of listing agreement. For period from 2013-16 their study also demonstrated that non-financial disclosure are very low India. Furthermore their research found that profitability variables were having positive relation to ESG. Tripathi & Bhandari, (2015) have examined the social responsible portfolios in relation with the general portfolios of Indian stock market. Their findings revealed that during crisis and post-crisis periods, the SR portfolio outscored other stock portfolio and the benchmark index, and that socially conscious investment portfolios exceeded other investments even on the basis of net selectivity gains, as measured by Fama's decomposition measure. Sudha, (2015) contrasted the S&P ESG India Index's behaviour to that of the Nifty and the S&P CNX 500. The results showed that the sustainability index outscored the CNX 500 in terms of annual returns. When compared to the other two benchmark indices, the sustainability index returns have a low risk. In the medium and long run, volatility remains in the sustainability index, nifty index, and CNX 500, with turbulence being more severe in the downward tendency than in the uphill tendency.

Table 2: Top 10 most cited research papers

Title	Journal	DOI	Year	Local Citations
The business value of ESG performance: the Indian context	Asian Journal of Business Ethics	10.1007/s13520-016-0064-4	2016	26

Environmental, social and governance (ESG) performance and firm performance in India	Society and Business Review	10.1108/SBR-06-2022-0162	2023	23
Determinants of environmental, social and corporate governance (ESG) disclosure: a study of Indian companies	International Journal of Disclosure and Governance	10.1057/s41310-020-00085-y	2020	22
Does corporate sustainability impact firm profitability? Evidence from India	Management Decision	10.1108/MD-04-2017-0381	2018	20
Does corporate social responsibility disclosure impact firm performance? An industry-wise analysis of Indian firms	Environment, Development and Sustainability	10.1007/s10668-021-01859-2	2022	11
Socially responsible stocks: a boon for investors in India	Journal of Advances in Management Research	10.1108/JAMR-03-2014-0021	2015	11
Impact of ESG score on financial performance of Indian firms: static and dynamic panel regression analyses	Applied Economics	10.1080/00036846.2022.2101611	2023	10
Do investors value the nonfinancial disclosure in emerging markets?	Emerging Markets Review	10.1016/j.ememar.2018.05.001	2018	9
How does an investor prioritize ESG factors in India? An assessment based on fuzzy AHP	Managerial Finance	10.1108/MF-04-2022-0162	2023	9
Risk-return and Volatility analysis of Sustainability Index in India	Environment, Development and Sustainability	10.1007/s10668-014-9608-8	2015	9

4.7 Keyword Analysis

The keywords analysis through the overlap map introduces a spectacular representation of the emerging trends in the research especially in the field of ESG (Environmental, Social, and Governance) (figure 8). The map is a visualization of the occurrence of different keywords and how new or emerging the terms are, and this is indicated by the nodes (the light-colored ones are fresher and newer concepts, and vice versa). The main topic lays in ESG, and such similar terms as corporate governance, sustainability reporting, and social responsibility are mentioned here very often. It is important to note that such keywords as socially responsible investing, emerging markets, and corporate social responsibility are becoming increasingly popular, which indicates the increase in interest towards these issues. Also, such concepts as climate change, financial distress, and Indian companies become more and more prominent targets of research in the context of ESG. The line width of every node is proportionate to the occurrence that is, more popular discussions have larger nodes than less popular ones like ESG scores, sustainable development and governance. The map emphasizes the growing amount of incorporation of ESG factors to the financial and corporate study, and points out changing emphasis and interest on India and its part of statistics sustainable investing. The gradation of the keywords per time depicts the movement of time to recent research areas and vastness of the research in the realm of ESG.

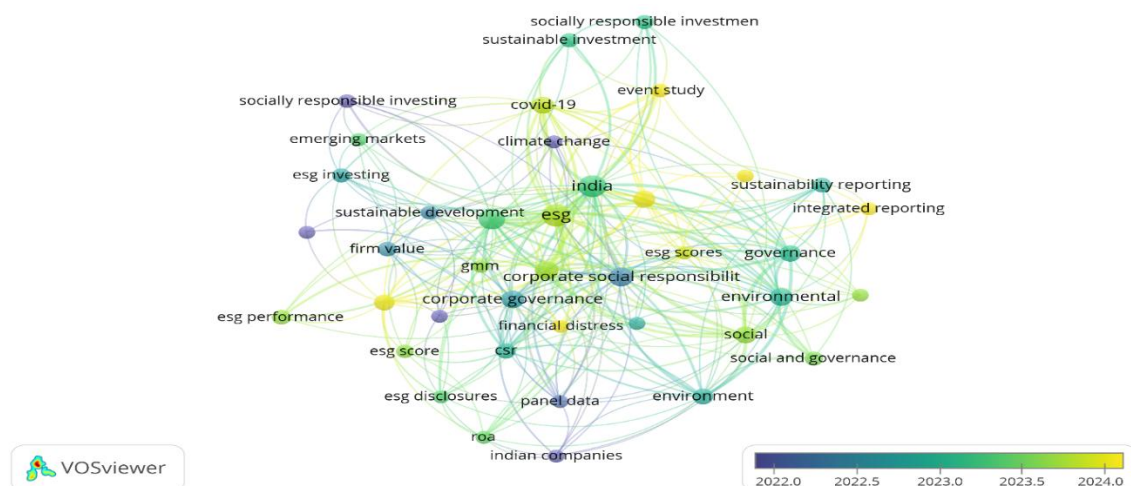


Figure 8: Keywords overlap map
4.8 Thematic Analysis

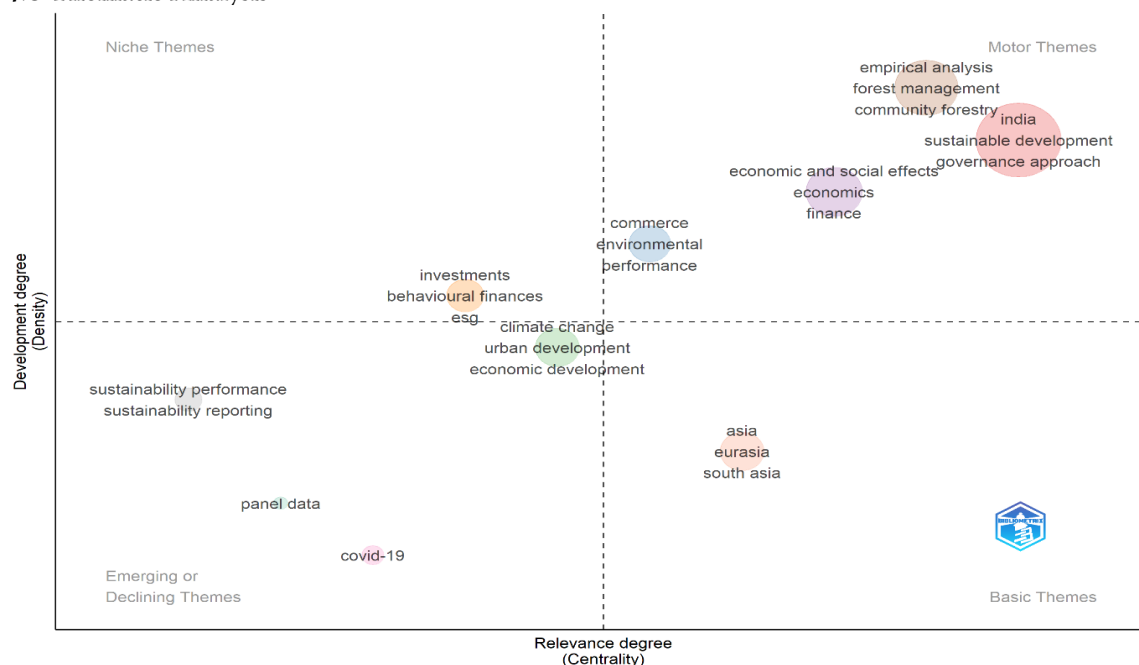


Figure 9: Thematic Analysis of ESG Literature in India

The thematic map of figure 9 indicates the topic progression in research of Environmental, Social, and Governance (ESG) area and more. The map represents the degree of development (or density) of different research themes on the y-axis, and degree of relevance (or centrality) of them on the x-axis. The combination of these two aspects defines the thematic landscape, which divides topics into four quadrants: Niche Themes, Motor Themes, Basic Themes and Emerging or Declining Themes.

Niche Themes

Niche Themes quadrant covers topics which would be called fledgling but ones that are becoming more critical and academically relevant. Investments, behavioral finance, sustainability reporting are some of the themes especially in this quadrant. Although the above topics are not yet the primary subjects of research, they are promising due to the attention they attract to some emerging aspects of ESG. The key questions, which are of interest to researchers that are also interested in behavioral finance and investing matters, are the effect the ESG criteria have on certain investment decisions and the response of investors towards social responsible investments possibilities. With the increase in the market size of sustainable investments, the themes will probably become increasingly relevant and it is likely that deeper exploration of sustainability performance, and company reporting of such performance, will occur. It specifically has a role to play in sustainability reporting because firms start recognizing the value of transparent communication of their environmental, social and governance processes. The large number of studies in the fields shows that there is an increasing need to incorporate sound frameworks which would bridge the gap that exists between investment decisions as well as sustainability indicators.

Motor Themes

Motor Themes quadrant refers to themes that are the most influential and mature in the field that the dominant research aspect of ESG is focused on at present. The topics are highly developed with a high degree of relevance that incorporates such key terminologies as sustainable development, economic and social impacts, climate change, governance approach, and India. These are not new and have been studied well and are very important to consider when discussing sustainability, mitigation of climate change, and the overall societal impact of governance policies. Another theme in the ESG discussion is the concept of sustainable development where the discussion is how policies, investments and business practices can be compatible with long term environmental and social aims. The governance options and the role that corporate governance plays in a way attaining sustainable development are also very important more so in the face of the growing pressure of corporate social responsibility (CSR). In addition, the theme of economic and social impacts highlights the increased importance of the role that businesses play in local and world economies with special emphasis being done on how environmental issues must be incorporated into standard economic evaluations. The fact that India is included as a major theme also implies that it is gaining a more prominent place in the ESG debate in the world. India is rapidly becoming the hotbed of sustainable development due to its vast population, the fast underlying rate of industrialization, and the urgent issues concerning the environment, which makes it an essential regime to study by any scholars interested in studying emerging markets and integrating ESG into these environments.

Basic Themes

The Basic Themes quadrant, positioned at the bottom-left, contains well-established themes that are widely recognized but may not necessarily be at the forefront of current ESG research. These themes, such as climate change, economic development, and urban development, have been extensively researched for years but are foundational to understanding ESG topics. Urban development and its relationship with economic development remain critical as urbanization accelerates globally. However, these themes may be becoming less innovative compared to newer topics emerging in the Motor Themes quadrant. These basic themes continue to be important but are less likely to drive new research directions on their own.

Emerging or Declining Themes

Finally, the Emerging or Declining Themes quadrant, located at the bottom-right of the map, contains terms like COVID-19 and panel data. These topics may be declining in relevance due to the passage of time and shifting priorities in the research community. COVID-19 had a temporary surge in importance as it directly impacted social behavior, economic systems, and corporate governance practices worldwide, particularly with respect to supply chains, employee management, and corporate responsibility. However, its research significance is likely to decline as the world moves beyond the immediate impacts of the pandemic.

4.8.1 Major Variables Used in Indian ESG Literature

Table 3 shows the variables that have been studied along with ESG in India. Most of the studies have checked the impact of ESG disclosures on firm financial performances (Bhaskaran et al., 2020; Bodhanwala & Bodhanwala, 2018; Chauhan & Kumar, 2018; Fahad & Busru, 2021; Sachin & Rajesh, 2021; D. Sharma et al., 2019; P. Sharma et al., 2020), a similar no. of studies have touched the riskiness of the stocks (Jain et al., 2019; Meher et al., 2020; Shaikh, 2021; Sudha, 2015). Only one study conduct by Prajapati et al., (2021) have used primary data, rest studies' results laid on data from secondary source of information, databases such as Bloomberg and Thomson Reuters are widely for ESG scores for studies based on secondary data, since these databases have different methods for screening ESG stocks and Bloomberg do not provide methodology because of competitive reasons, therefore there is no gainsaying the availability of biases on ESG stock screening by these database, this facilitate the need of more studies with primary source of information incorporating the gender, geographical, economic, literacy diversity. Moreover all studies are of quantitative nature, the real picture is still uncovered so this provides a lot of scope of conducting qualitative research. Studies have cited that new firms do not disclosure non-financial information; content analysis should be conducted to check what all non-financial variables are prevalent in new firms. Since the concept is evolving and most of the authors have supported the fact that ESG disclosures are still at infant stage in India.

Table 3: List of Variables used in ESG Literature in India

Variables Used with ESG Scores or	Articles
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Disclosures	
Financial performance (ROA, ROE, ROIC, EPS)	(Bhaskaran et al., 2020; Bodhanwala & Bodhanwala, 2018; Chauhan & Kumar, 2018; Fahad & Busru, 2021; Sachin & Rajesh, 2021; D. Sharma et al., 2019; P. Sharma et al., 2020)
Market performance (Tobin's Q)	(Behl et al., 2021; Bhaskaran et al., 2020; Chauhan & Kumar, 2018, 2019; Fahad & Busru, 2021; D. Sharma et al., 2019)
Volatility	(Jain et al., 2019; Meher et al., 2020; Shaikh, 2021; Sudha, 2015)
Firm Size, Firm Age, Leverage, Ownership	(Chauhan & Kumar, 2019; P & K.B, 2020; P. Sharma et al., 2020)
Credit rating	(Bhattacharya & Sharma, 2019; Prajapati et al., 2021)

4.8.2 Future Research Questions

The thematic map points towards several emerging themes that warrant further research. These emerging areas are gaining traction and should be explored in-depth in future studies to better understand their impact on ESG and related domains. Below is a table summarizing the emerging themes and potential research questions:

Emerging Theme	Future Research Questions
Sustainable Development	How can businesses integrate sustainable development principles in their core strategies to achieve long-term success?
Climate Change	What role does corporate governance play in mitigating climate change within emerging economies like India?
India	What are the unique ESG challenges faced by Indian companies, and how do these differ from global practices?
Governance Approach	How can different governance approaches influence the adoption of sustainability in corporate policies?
Social and Economic Effects	How do social impacts of corporate governance and sustainability affect local communities in emerging markets?
Sustainability Reporting	What are the most effective frameworks for sustainability reporting in the context of corporate transparency?
Behavioral Finance	How do investors' behaviors change when they are presented with companies that align with ESG criteria?
Financial Distress	How does ESG performance correlate with financial distress among firms in emerging markets?

5. CONCLUSION

This study offers a thorough analysis of the current landscape of ESG research in India, by systematic review using bibliometric tools. The integration of ESG dimensions offers a holistic view of the growing significance of Environmental, Social, and Governance (ESG) issues in India. There are multiple findings of the study, first, it finds that Sharma D, Gupta S, and Kumar S are leading contributors to ESG literature in India. Second, it reveal the influential sources for ESG-related research such as the "Australasian Accounting, Business and Finance Journal" and the "Journal of Cleaner Production". Third, in terms of institutional contributions, the University of Delhi and Symbiosis International (Deemed University) are the primary drivers of ESG research in India. Fourth, The keyword analysis uncovers the emerging focus areas within the field, with terms such as socially responsible investing, climate change, corporate governance, and sustainability reporting becoming increasingly prevalent. The thematic analysis categorizes research topics based on their centrality and development, providing a clear view of how the ESG research agenda is evolving. The study reveals that sustainable development, economic and social effects, and governance approaches are central themes, with India being a focal point for much of this research. The Motor Themes quadrant reflects well-developed and influential topics, highlighting the integration of ESG in both financial and market performance measures. Meanwhile, emerging themes such as economic development and urbanization show growing relevance, especially in India, which is

becoming an increasingly important area for global ESG research. Furthermore, the study unveil the major variables used in the ESG literature in India and pave the way for future researcher by providing potential future research questions.

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