

Thematic Review of Literature on Sustainability and Small and Medium-sized Enterprises

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Abstract— Using a thematic qualitative analysis, this study aims to identify dominant themes previously highlighted by various systematic literature reviews and studies in the field of sustainability and small and medium sized enterprises (SMEs). The studies picked for this paper range from nascent stages of the emergence of the concept of corporate sustainability in business to present-day targeted studies on SMEs. This study has attempted to highlight the recurring, emerging and neglected themes in the literature and concludes with some key findings: 1) the research on sustainability and SMEs remains focused on generic rather than targeted studies; 2) sustainability frameworks specifically designed for SMEs remain under-researched as opposed to large firms 3) there is a requirement to look more at the SMEs in the service sector. This paper also highlights other dominant themes in literature and finally, offers suggestions for areas of future research.

Index Terms — sustainability, small and medium-sized enterprises, literature review, sustainable development.

I. INTRODUCTION

When the Brundtland Commission published ‘Our Common Future’, in 1987, the report defined sustainable development as “the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs.”. Since then, sustainability has found its way into different sectors, including business.

Within the larger ambit of the business sector, sustainability has several meanings – from a more economically based definition to one that has a rooting in eco-friendly practices. Recently, the latter has become a defining feature of several businesses, whether large or small. Sustainable business practices are adopted more widely, with their impact and benefits being studied on a larger scale in academia. However, there continue to be gaps in the existing research, specifically when the question of small and medium enterprises (SMEs) rolls in.

What sets SMEs apart from larger businesses, other than their smaller operational size, is a more targeted and personalised approach, along with a greater focus on meeting individual customer demands rather than a generalised business strategy. However, with sustainability and environmental impact becoming an increasingly heated debate in the world of business, academia has also shifted its focus to studying how sustainability codes into the operations and goals of small businesses.

Traditional business models that look at growth and profit-maximization do not look at the social and environmental crises that are characteristic of the business world around them, which has resulted in modern markets demanding a more sustainable approach [1, 2, 3]. Research

post-2019 also follows a similar discourse, while highlighting how the pandemic exposed the fault lined in the present philosophies that surround CSR and dominant business models that often keep sustainability on the back burner [4, 5].

As is the case in any emerging discourse in academia, sustainability and SMEs is also a theme where several gaps exist. Reviewing the literature on this theme, this paper looks at some selected articles and studies, along with previously conducted Systematic Literature Reviews (SLRs) and attempts to highlight what themes in the area of sustainability in small businesses are being explored, and which ones remain neglected or have insufficient literature addressing them.

II. OVERVIEW OF LITERATURE

As mentioned above, the discourse on sustainability in business has certainly found a larger space recently in academia. Academics tends to reflect trends and patterns in the business sector. Regarding sustainability and environmental consciousness, in the past decade it has drawn heavily from the field of environmental ethics and also from literature on the concepts of sustainable development and corporate social responsibility (CSR).

As sustainability becomes a developing theme relevant for business, environmental ethics has also taken up more and more space within the larger ambit of business ethics, which was earlier concerned with human ethics and morality, and not related much with environment [6, p. 31]. CSR itself emerged in business literature as late as the 1970s, concerning itself with employee behaviour, moral issues and social responsibility [7]. Only after the 1990s did the ‘business ethics’ discourse begin to look at environmental

aspects and sustainability.

The most widely accepted definition of sustainability continues to be the one that the Brundtland Commission offered in 1987, and incorporating that idea in business, several authors have attempted to define what sustainability would mean in the corporate and business world. Dyllick & Hockerts [8, p. 131] define it as “meeting the needs of a firm’s direct and indirect stakeholders (shareholders, employees, clients, communities etc.) without compromising its ability to meet the needs of future stakeholders as well”. This definition is a narrow understanding of what sustainability means for business today.

In the longer run, corporate sustainability looks beyond economic sustainability. Elkington’s [9] ‘triple-bottom-line’ concept, with three key dimensions – economic sustainability, social sustainability and environmental sustainability, is often used to give a wider, more comprehensive definition. Sustainability is looked at as being able to address the needs of the society, and at the same time creating enhanced value beyond the stakeholder’s needs [10]. Sustainability in the business sector is often looked at through the lens of CSR, which was earlier related to philanthropic activities and charity, but has now evolved into a broader concept. Corporate sustainability is a construct under this larger umbrella of CSR, pertaining to an organisation’s focus beyond its business goals, and including issues related to equity, ecology and environment within their core business strategy [11]. Why sustainability is seen as a game-changer in overall CSR strategy is because earlier it was seen as a voluntary way to give businesses an edge over others. However, today sustainability included as a factor has made it necessary for company survival in the long run [12]. It is seen as a vital factor in sustaining an organisation.

These definitions and most others that exist in the academic discourse, generally look at a greater majority of large firms. This is because, while an attempt is made in studies to include a varied sample size, the contrast between the operations of large firms and small firms cannot be ignored. Large firms have a greater operational size. Their visibility is greater, along with the pressure that they face from their stakeholders, making them take up sustainability agendas earlier, and with greater urgency than SMEs [13, 14]. Research reflects this in its biased attention towards sustainable practices of large corporations and enterprises. The political, business and academic discourse does recognize and talk about the role SMEs play for economy and society, however it lacks when the question of sustainability in SMEs rolls in.

Thompson and Smith [15] suggested reasons for this continued lack of literature on SME sustainable practice that may as well be applicable in the present, if not to the same extent. Firstly, they suggest that small firms are often seen as ‘resource deficient’, i.e., therefore not in a position to look at sustainable practices at the cost of their survival. Secondly, dominant research methodologies cater to the study of larger

firms, rather than small businesses, and may not be compliant to the study of small firms. Thirdly, an information deficit exists when it comes to small firms, whereas large firms have abundant data to offer for research. Finally, they argue that the public profiles of larger firms enable them to have greater visibility in academia than small firms.

Existing literature also looks at the various barriers that SMEs encounter when attempting to adopt more sustainable frameworks. Some of the common themes that appear frequently with regard to these barriers are the lack of institutional environment, as is the case with established large firms; the absence of business benefits and profitable goals that may be consequent from sustainability frameworks; and the lack of guidelines, or norms when it comes to planning, monitoring, evaluating and predicting the future trajectory of business sustainability [16, 17, 18]. Literature explores how several of these barriers are the result of the very nature of SMEs [19].

The category itself is a heterogenous one, and often the actual strategies of each firm are based on their separate characteristics. [20]. The caps on number of employees, annual turnovers and balance sheets vary from region to region. Sustainable practices then become a variable dependent on these factors, which may not even be regionally motivated at times [21, 22, 23, 24]. Despite this seemingly infinite combination of differing factors, some general characteristics are highlighted by the existing literature that are helpful in understanding the obstacles that SMEs face in pursuing sustainable practices. These are – owner-managed, personalized firms. Their functioning is dependent on individual owner-managers rather than boards, as is the case with larger companies. This makes individual preferences a greater factor in whether or not an SME decides to indulge in sustainable practice [25, 26, 27, 28]. This characteristic also gives them a degree of independence and allows them to grow in multiple directions, despite existing in niche sectors. This increases the risk taken and reduces the margin to adopt long-term practices of sustainability over the immediate need to expand and increase profit margins. SMEs operate with a foundation in personal relationships, depending on local systems of production, distribution and community and more often than not, with a limited cash-flow [7, 29, 30]. These factors are amongst the ones most commonly cited when literature deals with obstacles to sustainable practices in SMEs.

Several authors also point out the concerning trend of how SMEs are expected to follow the footsteps of larger firms when it comes to sustainable practices.. This is concerning since SMEs are vastly different from large firms, both operationally and financially. They argue that since their nature itself is less formalized than larger firms, it is argued that SMEs cannot simply ‘adopt’ the strategies that are followed by large companies [27, 31]. Even though businesses, small or large, look at some form of CSR strategy, they differ greatly in how they approach the issue of

sustainability.

In that regard, both academics and businesspeople have a greater focus on large firms, as opposed to SMEs, despite the crucial role that they can possibly play in the future of sustainability in business. Research is relatively lacking on this theme, despite the recognized role of SMEs in the area. This poses a limitation as well as an opportunity, as it opens up gaps in the research that offer prospects for future research.

III. THEMATIC ANALYSIS OF LITERATURE

Themes in literature help identify both saturated and lacking research areas. Themes that stand out in the literature on sustainability and SMEs can be identified by analysing the various Systematic Literature Reviews (SLRs) available. SLRs look at selected studies within a time frame and attempt to statistically draw the most dominant themes in the literature. This gives them a quantitative aspect which adds value to the study. There are certain themes that occur more frequently than others, and appear consistently across several SLRs. In this section, some notable reviews are mentioned, along with the most dominant themes that have been identified.

Of the SLRs considered for this review, one study stands out by Martins, Branco, Melo, & Machado [32]. The study has taken up two decades of literature (2000-2020), studying the theme of sustainability in small and medium-sized enterprises (SMEs) and analysed 42 papers. The study is comprehensive owing to a quantitative and qualitative methodology, along with a focus on future research agenda. The clusters that this study identifies in research themes are – sustainability and SMEs’ performance; green and environmental management issues in SMEs; social and cultural issues in SMEs and their impact on sustainability policies; and values, skills and capabilities needed for sustainability in SMEs.

Another notable Systematic Literature Review (SLR) is by Bartolacci & Caputo [33], examining a different time period between 1999-2018. The results of this review are clubbed into three clusters – first, role of innovation and entrepreneurship and their impact on sustainability in SMEs; second, corporate social responsibility in the context of SMEs; and third, green management and issues for SMEs. These are similar to the clusters from the previous study, and corroborates that the themes have continued into the post-pandemic world. In each cluster, however, there were certain sub-themes that necessitate a deeper analysis. For instance, in the first cluster, the authors suggest that sustainable supply chain managements through SME collaborations could be an interesting area of study, and has not been looked into so far. Similarly, a greater focus on the service industry could result in a more versatile research instead of the usual discussion around manufacturing sector.

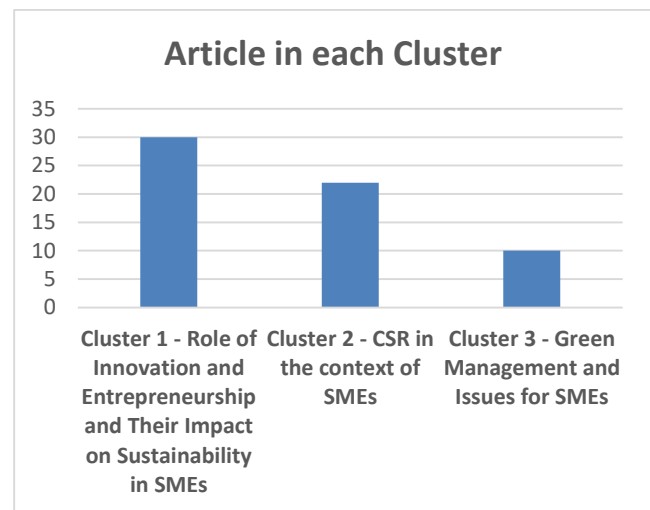


Figure 1: Articles in each Cluster in selected study [33]

In the third cluster, which has the lowest number of articles, green management seems the least researched area. This includes environmental practices, such as waste reduction, resource consumption, and natural resources protection. The research is recent, and has great future scope, specifically since the SMEs themselves are considering a shift towards greener practices and implementing circular economy models in various parts of the world. A sub-theme identified with great scope was the relation between the environmental and financial performance of a firm. SMEs, in particular, cannot disregard the financial point of view when looking at operating in line with the principles of circular economy [33]. In other words, only when it is profitable can they move towards sustainable practice, and thus study into the relationship between such practices and financial performance becomes critical.

Another study which specifically looks at the sustainable innovation initiatives in SMEs, identifies certain themes with regard to sustainable innovation. This research looked at 72 papers. The time period, much like the trend with other SLRs, was from 2000-2019, with a divide at 2010-11 to do a comparative study between the data of the two decades [12].

This particular study centres around three questions – what are the sustainable innovation initiatives taken by SMEs; what are the parameters to measure their impact on performance; and how exactly does sustainable innovation increase performance. In answering these research questions the study highlights certain issues that are recurring in research when sustainable initiatives in SMEs are concerned such as external and internal drivers, barriers, external and internal enablers and partnerships and collaborations [12, pp. 13-18].

Drivers (external) here include governmental regulations, market turbulence, pressure from stakeholders (buyers and customers), pressure from external networks, and stakeholder expectations. Internal drivers on the other hand include perceived benefits, attitudes, established environmental management programs, organizational culture and

commitment towards environmental protection [34, 35, 36, 37, 38]. Studies focusing on barriers to sustainable innovation look at perceptions, lack of resources, poor market structure, lack of appropriate logistics infrastructure, lack of government or consumer support, unorganised returns management etc. [39, 40, 41, 42, 43].

Research that looks at enablers, both external and internal looks at availability of public funds [44], government support [45], empowering SMEs to facilitate creativity and to increase social capital [46], technologies available to reduce energy consumption, market and community views, R&D investments [34], organizational capabilities [47], size of the firm, personal views, commitment, motivation and leadership [35]. Finally, the theme of partnerships and collaborations involves study of aspects of public-private partnerships [48], collaborative networks to access environment friendly technologies, relationship learning [34], symbiotic relationships with donors and franchises [49], cooperation with universities and research agencies [50], buyer-supplier relationship for green procurement [51], and strategic partnerships to help SMEs strike a balance between growth and environmental sustainability [52].

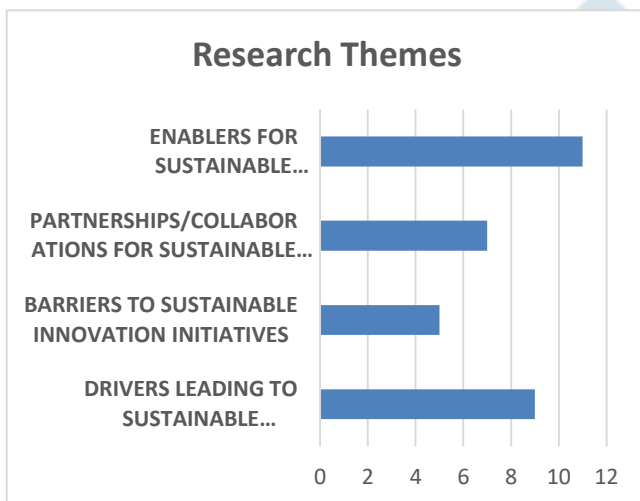


Figure 2: Research Themes as identified by cited study [12, pp. 13-18]

Another common theme identified in the literature is that performance and green and environmental management issues studied in academics show a dominance of the manufacturing sector being analysed instead of logistics, service, transport etc. [53, 54, 55]. Martins et. al [32] suggest that this is possibly due to the energy-intensive nature of the sector, with heavy carbon footprints and problematic labour practices.

IV. NEGLECTED AREAS OF RESEARCH

Research on sustainability in SMEs recognizes the urgency for sustainable business practices. Despite this realisation, the literature on certain key angles remains scant. The overall literature pertaining to SMEs and sustainability itself lacks in

exclusivity, often a subset to research focused either on sustainability in business or on sustainable development as an umbrella theme. This makes it difficult to draw up targeted approaches that are tailored for environment friendly practices in SMEs. One study that picks up whether papers use theoretical frameworks or not, shows that out of a sample of 42, only 17 utilised one.

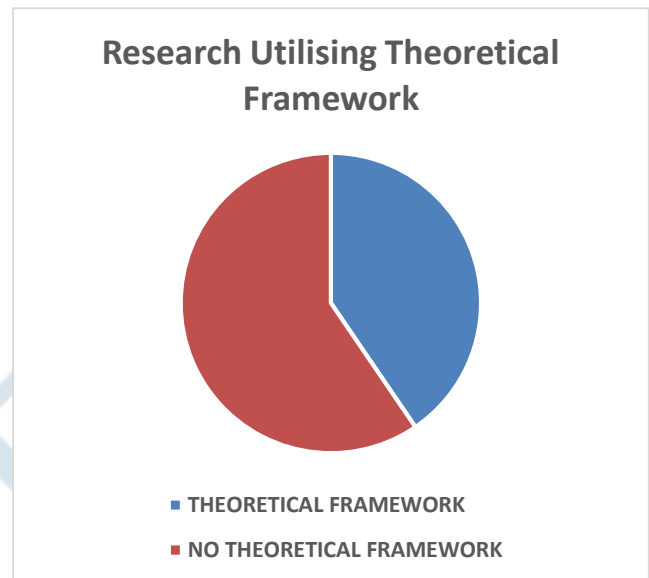


Figure 3: Research that utilises theoretical framework out of sample of cited study [32, pp. 7-11]

One glaring gap in the research on sustainability and SMEs is the lack of theoretical analysis. Whether through the lens of environment and sustainability, or through business theories, the predominant trend is to not support a study with a theoretical framework. Sustainability itself is a multidisciplinary dimension, offering several disciplines and their theories for a more inductive approach to research. This could help in using the study of sustainability trends and practices that SMEs can engage in to draw up conceptual models on sustainability and performance that are suited to small firms worldwide. It could eventually also help core business strategies of SMEs be inclusive of sustainable initiatives from their very inception.

Another gap that can be identified is that of sector-specific research. Most studies look at SMEs as an all-encompassing category, disregarding the sheer diversity of sectors that they exist in. Each sector has a different environmental impact, making the existing research too generalised for applicability. As mentioned earlier, research focuses too much on samples abundant with manufacturing firms. Non-manufacturing sectors, specifically such as logistics, family businesses etc. suffer a lack of literature catering to them. A 2019 study in the US revealed that approximately 600 MSEs were registered under the manufacturing sector. In comparison to that, over 3000 MSEs were belonged to Transportation and Warehousing. Almost 1050 small businesses were related to accommodation and food services, and over 3700 belonged

to sectors such as social assistance educational services, health care etc (Statista, 2019). The numbers show the skewed reflection of sector-wise study of MSEs in the literature. However, the factor of ease of assessment plays an important role here.

An assessment of impact on the environment is not always possible in the case of the service sector. Within a supply chain, the production stage is where the most monitoring of carbon footprints occurs, however the distribution and last-mile delivery stages often face a neglect.

This neglect, however, can also be rectified as big data and analytics becomes more integrated in business models. Unlike the visible impact of the manufacturing sector on the environment, the impact of the service sector requires a more data-driven approach for assessment which is possible now due to digitization of business models [56].

Another under-researched area is the relationship between social and cultural issues in SMEs and how they impact a firm’s sustainability policy. This is critical because SMEs are often local firms. They exist within the ambit of a highly localised setting, with certain relationships with the society and culture around it impacting its operations. This theme thus demands greater attention from academia. Systematic literature reviews also reveal that the research on the relationship between sustainable practices and the performance of SMEs is surface-level at best. While the research points towards a positive relationship, there are several dimensions of ‘performance’ of a business that can be explored, specifically in regard to a variable such as sustainable policies. This avenue for future research could involve a greater understanding of what could function as a great facilitator for SMEs to opt for more sustainable choices.

There is also a lack of literature when it comes to the dependency of the performance of SMEs on whether or not they adopt sustainability initiatives. The theme of sustainability and business performances in SMEs itself lacks in research, from a simple dependency relationship to how varied strategies have varied impacts. Several qualitative studies exist, explaining how improved environmental practices could benefit SMEs, their performance and maximise profit in the long run; but empirical research on this theme severely lacks. Evidence-based studies that establish a clear relationship between the performance and policies of SMEs that pursue sustainable strategies would add great value to literature. There is also a lack in research when it comes to how ‘greenwashing’¹ market strategies impact sustainability in business, and whether they result in greater financial gains as compared to actual sustainability practices. These strategies pose a significant danger to sustainable practice in SMEs.

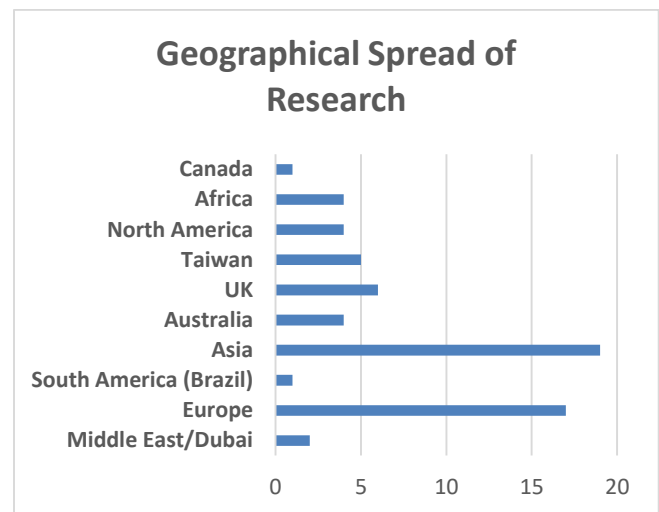


Figure 4: Example of SLR sample geographical spread [12, p. 6]

Research also seems to be predominantly located in limited geographies – Europe and Asia. Research papers included even in this study show few publications from other regions of the world [12, 32]. A surprising lack of Chinese and American SMEs is noticed when the literature is surveyed, considering the large carbon footprints of the industries located in both the countries. There is also the question of the share of successful SMEs in a region/country’s economy which can be studied with relation to sustainability.

V. CONCLUSION

Sustainability in small and medium enterprises offers a vast area of academic research, with several themes existing as well as emerging within it. While there is immense literature than can fall under this category, it lacks when it comes to empirical studies that target specific arenas of research such as theoretical studies, diversity in sectors analyses to study SME sustainable practices, SME-specific framework of sustainability, sustainability and financial performance of SMEs, and a regionally diverse character of research in the area.

Even within the dominant themes that circle around and within sustainability when it comes to SMEs, there are several that could benefit from deeper analysis. Since the theme itself is recent and highly relevant to contemporary times, the nature of actual, on-ground sustainable practices are evolving. Incorporating this change is necessary for existing themes. This area of research remains far from saturated, and necessitates a shift in discourse when it comes to how, why and when do SMEs adopt sustainable practices, and what is the exact nature of them. These gaps open up future prospects for research.

The idea is to integrate the way sustainability is seen by SMEs and their customers into the existing academic discourse. It is increasingly changing its nature from being an additional marketing strategy to a core requirement of a

business in order to gain as well as retain their clientele. This is especially true in the case of SMEs that operate with a focus on trust-based relations, and therefore it necessitates the need to conceptualise frameworks that are specific to them to study these increasingly important sustainable practices.

Declaration: This article/paper is original in content, unpublished and has not been submitted for publication/ web upload elsewhere. The facts and figures quoted are duly referenced, as needed, and are believed to be correct.

The authors declare no conflict of interest.

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