**SUSTAINABILITY PERFORMANCE REPORTING IN GHANA: THE VIEWS OF SMEs**

**Owusu Acheampong (Corresponding Author)**

*Finance Department,*

*College of Humanities and Social Sciences,*

*Kwame Nkrumah University of Science and Technology, Kumasi, Ghana*

oacheampong.fin@knust.edu.gh

ORCID: https://orcid.org/0000-0001-8969-9281

**Venancio Tauringana**

*Department of Accounting,*

*Southampton Business School,*

*University of Southampton, Southampton, UK*

v.tauringana@soton.ac.uk

**Nicholas Asare**

*Department of Accounting and Finance,*

*School of Business,*

*Kwame Nkrumah University of Science and Technology, Kumasi, Ghana*

nicholas.asare@knust.edu.gh

# Abstract

The study examines the perspectives of small and medium-scale enterprises (SMEs) on sustainability performance reporting in Ghana and also determine the impact of the barriers and motivations on SMEs’ decisions to engage in sustainability performance reporting. The study is based on cross-sectional data from 183 SMEs using a structured questionnaire as the research instrument. The study reveals that the extent of sustainability performance reporting of SMEs in Ghana is 38.3%. The results also show that financial constraints, lack of knowledge and awareness, lack of expertise, absence of legal/regulatory requirements and lack of motivation are some of the main barriers perceived as impeding SMEs from engaging in sustainability performance reporting. The study validates the propositions of the resource-based view theory. The findings of the study have important implications for considerations by the key stakeholders in trying to encourage SMEs to adopt or improve sustainability performance reporting behaviour in Ghana.

**Keywords –** Sustainability reporting, Motivation, Barriers, SMEs, Resource-based view

**1.0 Introduction**

Sustainable development (SD) remains an important agenda in the last decade and will continue to be viewed as a critical issue in the foreseeable future (Holden et al., 2014; Cristian et al., 2015). Given the extent of the sustainable development agenda, the concept has become an increasingly relevant issue in business fields as well as in academia and is attracting more media and political attention, reflecting greater public awareness (Parnell, 2016; Goyal et al., 2013; Jones et al., 2005). Sustainable development generally addresses the issue of how the present generation satisfies their needs without jeopardizing the ability of future generations to meet their needs as well (WCED, 1987).

Sustainability reporting (SR) as an offshoot of the sustainable development agenda is perceived as a fundamental component of a firm’s strategy, aligning societies need for information with internal organization processes to minimize information asymmetries (Ortiz-Martínez et al., 2023; Rodríguez-Gutiérrez et al., 2021). Corporations, both large and small, are expected to embrace sustainable practices to meet regulatory requirements and to align with the changing expectations of shareholders and other stakeholders (Afolabi et al., 2023; Boakye et al., 2021). Small and medium-sized enterprises (SMEs) individually have, by deﬁnition, very limited operations, resources, expertise and therefore might not have the technical capability to report sustainability, to the same degree, as compared to large firms (Parker et al., 2009). SMEs engaging in reporting of non-financial activities give a signal to the public about the firms’ readiness to give information about how it deals with societal issues and this may enhance an enduring cordial relationship between the firm and its stakeholders leading to a continuing sustainable development (Khan et al., 2020; Said et al., 2009).

SRis thus a channel through which firms communicate to their diverse stakeholders the measures taken to address their economic, environmental, and social concerns (Hahn & Kühnen, 2013). The social dimension aspect of sustainability evaluates a firm's impact on the social systems within which the firm operates. It has 48 indicators that are classified into four sub-categories namely, decent work and labor practices, society, human rights, and product responsibility (Ebiringa et al., 2013; Roca & Searcy, 2012; Khasharmeh, 2010; Sotorrío & Sánchez, 2010). The environmental dimension measures a firm’s impacts on natural and artificial systems covering inputs (e.g., water and energy) and outputs (e.g., waste, emissions and effluents), (Dragomir, 2012; Mazzi et al., 2012; Mikkilä & Toppinen, 2008; Veleva et al., 2003). This dimension covers 34 indicators that are grouped into twelve sub-categories while the economic dimension relates to firms’ ability to create value and improve financial performance (Orazalin & Mahmood, 2018; Amran et al., 2014; Lozano & Huisingh, 2011; Kent & Monem, 2008; Ho & Taylor, 2007) with nine indicators under four sub-categories. Elkington (1997) notes that the combination of all the three dimensions (social, environmental, and economic) is termed as the Triple Bottom Line approach. Hahn and Kuhnen, (2013) reiterate that only one or two-dimensional report(s) that cover(s) only a portion of sustainability concept cannot be regarded as SR but simply sustainability-related report e.g., environmental reports, social reports, CSR reports, sustainability reports and corporate citizenship reports. Therefore, SR should cover all the three pillars of social, environmental, and economic dimensions (Dienes et al., 2016). Some SMEs are proactively striving to set themselves apart from their competitors and recognizes SR as a highly influential and essential marketing tool (Carmo & Miguéis, 2022; Crossley et al., 2021). However, several documented research findings show a strong focus on large and multinational firms and a dearth of research on SMEs. Moreover, little is known about the **SME** preparers’ barriers and motivations for engaging in SR and one of the possible ways to overcome this gap will be by soliciting their views, philosophies and perceptions (Amran & Haniffa, 2011). Although few of the studies are based on the Africa continent; for example, Egypt (Rizk et al., 2008), Ghana (Rahaman, 2000), South Africa (Mitchell & Hill, 2009; Villiers, 2003) and Uganda (Tauringana, 2021), most of the documented evidence predominantly focus on developed countries while little attention is paid to developing countries context. Therefore, the objectives of this study are to investigate the extent of SR among SMEs in Ghana and determine the impact of the barriers and motivations on managers' decision to engage in SR. The study makes significant contributions by providing new evidence to the existing literature based on SMEs that will help policymakers to develop applicable policies suitable for this unique group other than generalizing evidence and findings of larger and multinational firms to them.

## 1.1 Sustainability Reporting in Developing Countries

Sustainability disclosure concepts and related theories have been predominantly developed based on firms in mature market environments in developed countries. These markets are efficient, formalized with strong systems, legislation, and enforcement mechanisms. These characteristics are in sharp contrast with the infant market environment found in developing countries, which are characterized by weak systems, loose regulation, and poor institutional governance structures coupled with corruption, poverty, and weak stakeholder power. Moreover, developing economies lack institutional mechanisms that regulate the reporting dimensions of SMEs; therefore, such published information is hardly produced by SMEs in the context especially where there is limited regulatory enforcement and a more concentrated ownership structure. Again, few studies done in developing countries have been criticized for applying theories, for example, legitimacy and stakeholder that is developed on the basis of evidence from firms in developed economies and are not always valid in the specific context (Dissanayake et al., 2016). Country contexts with varied environmental, economic, social and institutional dynamics may probably affect firm SR practices (Ramos et al., 2013).

Corporate social responsibility (CSR) in developed countries is significantly different from its distinctive manifestation in developing countries (Dartey-Baah & Amponsah-Tawiah, 2011). The study by Visser (2003) on CSR in African countries revealed that CSR is mostly connected with charity or philanthropy through firms’ social investment in health, development, education, sports, community services and the environment. Again, the practice and spirit of CSR in developing countries are often intensely resonant with religious concepts and traditional communitarian values (e.g., African Renaissance, Ubuntu and Omoluwabi), (Dartey-Baah & Amponsah-Tawiah, 2011). Different countries or societies will respond differently to the concept of CSR and the extent of a country’s development may be a key indicator of CSR orientations (Burton et al., 2000). Carroll’s (1991) Pyramid of CSR is one of the cited models in the literature. The model views CSR concept to be outlined in such a manner that the full range of firms’ responsibilities are embraced and also CSR comprises of four social responsibilities: philanthropic, ethical, legal and economic, in order of increasing importance (Dartey-Baah & Amponsah-Tawiah, 2011). Visser (2006) asserts that the relative significance ascribed to the responsibility features of Carroll’s pyramid differs in Africa since philanthropy responsibilities precede legal and ethical responsibilities at the base of the pyramid. Philanthropy responsibility in Africa often is viewed as discretionary acts of successful firms and socio-economic needs account for high prominence of philanthropic responsibilities. Economic priority in African settings is consequential to the prevalence of higher rate of unemployment and widespread poverty. Inadequate legal systems ensuing from the lack of pressure for good conduct, limited resources and administrative inefficiencies account for lower priority for legal responsibilities. Ethical responsibility, despite its importance, appears to have the least effect on the SR agenda in Africa and continues to remain the exception rather than the rule. In the context of Ghana, Ofori (2007) assert that corporate managers perceive their societal role as one that involves offering support to the public through social performance that extends beyond traditional corporate philanthropy. They strategically engage in actions that support the expectations of diverse stakeholders within the environment in which the firm operates.

CEOs actively embrace and demonstrate a proactive commitment to the SR concept, and this is driven by societal and individual ethical norms and values. In Ghana, top executives undertake sustainability activities purposely to enhance their corporate image, gain legitimacy and competitive advantage to remain relevant (Ofori, 2007). The author further affirms that SR strategies in Ghana (e.g., societal idiosyncrasies and cultural complexities) appear to influence sustainability practices which cast significant doubt about the applicability of foreign sustainability disclosure strategies. This is a clear manifestation of the difficulty encountered by foreign businesses operating in Ghana to implement SR policies formulated by their parent companies. In Ghana, the driving force of SR is the firms’ proactive involvement in areas where the government faces challenges, alongside their commitment to charitable and philanthropic endeavors. In contrast to advanced countries where SR is shaped by ethical considerations, formal regulations, and active stakeholder involvement, in developing countries, ethical concerns and brand image seem to have less prominence (Dartey-Baah & Amponsah-Tawiah, 2011). Due to the differences in the contexts of developed and developing countries in culture, political, socio-economic, corporate governance, market access, internationalization and stakeholder activism, there are reasons to confirm whether strategies and theories developed based on practices of advanced economies may be relevant to SMEs in the context of a developing country.

**2.0 Literature review**

Sustainability reporting (SR) has become a trending issue in the contemporary business environment (Galli et al., 2023) with SMEs increasingly recognizing its significance. Small and medium enterprises often initiate SR in response to stakeholder pressures (Carmo & Miguéis, 2022; Zarzycka & Krasodomska, 2022). Hasan (2016) provides insights into how managers of SMEs in Bangladesh perceive the concept of sustainability reporting, by examining the extent to which manufacturing SMEs sustainability issues are incorporated into their normal business activities. Using a survey approach by interviewing 13 managers, the results of the study reveal that, manufacturing SMEs in Bangladesh implement SR to a certain extent, however, managers address only those issues that suit their personal motives while many other critical issues such as environmental issues are totally neglected. Also, a study by Dias et al. (2018) examines CSR disclosure practices of 13 Portuguese SMEs and 44 Portuguese large, listed firms. Drawing on the stakeholder theory, the study analyzes the firm’s annual reports for 2011 based on content analysis techniques. The findings of the study indicate that firms give priority to sustainability issues that are directly associated with sustaining business and achieving economic results ([Amoako](https://www.emerald.com/insight/search?q=Kwame%20Oduro%20Amoako) et al, 2021; [Pobbi](https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=4275645) et al, 2020; [Arthur](https://www.emerald.com/insight/search?q=Clement%20Lamboi%20Arthur) et al. 2017). Although large firms report more information on society and the environment, sustainability disclosure practices do not differ significantly between SMEs and large firms. Steinhöfel et al. (2019) investigate how SMEs from German manufacturing firms deal with sustainability issues through SR implementations. The authors analyzed 14 sustainability reports to determine the extent of applying the framework issued by GRI as well as the disparities between firms that apply the GRI guidelines and firms that do not apply. Content analysis of each of the 14 reports is analyzed in line with the compliance to GRI G4 indicators. The empirical results of the study indicate that the extent of SR among German SMEs amounts to 30% while the various sustainability dimensions; Economic, Environmental and Social have reporting rates of 28%, 40% and 24% respectively. Bunclark and Barcellos-Paula (2021) employ a case study method to examine SR for the Competitive Business program in Peru by analyzing data of a sample of 72 SMEs from over 20 industrial sectors. The empirical results of the study indicate that social issues are highly reported with 52%, followed by environmental issues with 27% and economic issues with 21%. The findings also show that 78% of SMEs in Peru partially or fully meet sustainability disclosure requirements. Mondal et al. (2021) present a study to determine to what extent SR guidelines for both national and international are complied with by the SMEs in India. The study uses the content analysis technique to analyze the annual reports for the period 2018 to 2019 of the sample of 25 listed SMEs across five industrial sectors on the Bursa Stock Exchange. The study’s result reveals that the overall extent of sustainability disclosure level is moderate among Indian SMEs. Most of the research gleaned from the literature above shows that the research focuses on developed countries with no particular focus on SMEs. In the specific context of Ghana the literature on SR has focused on mining or the extractive sector even though SMEs across various industries abound (see [Amoako](https://www.emerald.com/insight/search?q=Kwame%20Oduro%20Amoako) et al, 2021; [Pobbi](https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=4275645) et al, 2020; [Arthur](https://www.emerald.com/insight/search?q=Clement%20Lamboi%20Arthur) et al. 2017). These studies mostly apply the content analysis method to analyze the sustainability reports of firms ([Arthur](https://www.emerald.com/insight/search?q=Clement%20Lamboi%20Arthur) et al. 2017).

Wilmshurst and Frost (2000) analyze the connection between the actual reporting practices and the perceived importance of specific factors leading to the decision to report environmental information in Australia. The authors use a mail survey of financial officers to establish specific factors that influence their decision to engage in environmental reporting contained in the annual report and also analyze the extent of environmental disclosures in the sampled firms’ annual reports. Belal and Owen (2007) also seek to investigate the views of senior corporate managers’ perceptions on the emerging phenomenon of CSR reporting by interviewing twenty-three (23) Bangladeshi nationals who are corporate managers during the period of December 2001 to March 2002. Employing qualitative research method, the key findings of the study reveal that, the main motivation contributing to current disclosure practice emanates from a desire on the part of senior corporate managers to manage powerful stakeholder groups, whilst forces such as demand for foreign buyers and parent companies’ instructions are perceived as pressure from external forces that drive the process forward. Belal and Cooper (2011) focus on the lack of CSR disclosure on three pillars of eco-justice issues: equal opportunities, poverty alleviation and child labor to investigate why this is the case and thereby discussing the causal motives behind corporate management reluctance to address these issues. In the light of this, the authors conduct twenty-three (23) semi-structured interviews with top corporate managers in Bangladesh. The results suggest that the key reasons for CSR non-disclosure include fear of bad publicity, lack of resources, low-profit levels, absence of legal requirements, poor corporate performance, and low awareness/knowledge of CSR reporting issues. Hossain et al. (2015) provide empirical evidence by examining senior managers’ perception and motivations of CSR disclosure in the context of a developing country, Bangladesh. Employing legitimacy and accountability theoretical framework as a lens for CSR disclosure, to achieve the objective of the study, a qualitative research method is adopted by conducting interviews with twenty-five (25) managers from the top 100 listed firms on the Dhaka Stock Exchange. The authors document that senior managers perceive CSR disclosure as a social obligation. It is further revealed that lack of a regulatory framework along with religious factors and socio-cultural are accounting for the low level of CSR disclosures.

Zhao and Patten (2016) aim to examine the perceptions of top managers in China regarding the purpose of, and pressures for, CSR reporting in the Chinese context. The study draws on the neo-institutional theory perspective to assess the perceptions of the managers. Conducting an interview for 14 top managers from 9 different state-owned enterprises, the authors document similar findings as in the case of most of the western economies, managers perceive that diversity of normative, coercive, and mimetic pressures that interplay connects to impact CSR reporting in the Chinese context. They further note that managers almost equally see the aim of CSR reporting as a tool to enhance corporate reputation, particularly in the face of the public. Nwobu et al. (2018) examines managerial perceptions of the factors influencing SR among banking, consumer goods, industrial goods, oil and gas firms in Nigeria. Using a sample of 81 firms, a questionnaire is employed as the main data collection tool. The findings of the study show that a mix of perceived factors including mimetic, normative and coercive are factors that appear to influence the SR of firms.

Matta et al. (2019) investigate the environmental management practices and determine the perception of top corporate managers on environmental reporting using a structured questionnaire survey to identify the factors influencing firms in the decision to disclose environmental information. Responses indicate that the ultimate perceived reasons for environmental disclosures are long-term survival, improved efficiency, reduction in waste and acknowledging social responsibility. However, no legal requirement to disclose, avoidance of issuing of confidential and sensitive information to avoid potential damage to firm’s image are major perceived reasons for not reporting corporate environmental information. Ismaeel and Zakaria (2020) examine the preparers’ perceptions of corporate SR as a separate voluntary reporting practice among firms in the Middle East Countries. The authors interview seven (7) business executives to ascertain their perception of corporate sustainability reporting. Drawing on the institutional theory, the authors document that sustainability is not perceived and understood in the same way among reporting firms in the Middle East and the difference in business executives’ perception is connected to the scope of firms’ operations, whether it is local or global.

**2.1. The Resource-Based View (RBV)**

The resource-based view, as propounded by Wernerfelt (1984) and Barney (1991) stresses that firms’ resources are divergently distributed and enduring over time. Wernerfelt (1984) and Barney (1991) note that resources are both tangible and intangible assets of the business which include machinery, brand name, trade contacts, customized technology, production efficiency, hire of skilled labor, organizational processes, capabilities, information, firm attributes, knowledge, information etc. and are stable over time or tied semi-permanently to the business. Darcy et al. (2013) adopt RBV as a theoretical lens to espouse the connection between internal capabilities and human resources as a possible source of SMEs' competitive advantage and the long-term sustainability of the firm. The authors debate that the unique attributes of SMEs signify that sustainability disclosure is more likely to be extensive in firms that pay considerable attention to the employee behaviors and talent pool. The authors develop a composite model from the perspective of SMEs, the human resource of the firms’ sustainability and its relevance to the SMEs’ context. The RBV of the firm and the concept of sustained competitive advantage need to become the philosophy of SMEs who are usually identified in the desperate attempt for business survival and growth (Darcy et al., 2013). Thus, the firm that possesses an environmental reputation is thought to be capable of retaining its shareholders and customers in the long run (Sulaiman et al., 2014) and this has the potency to improve its sustainability performance and stability over time. Firms that are extensively visible to media and highly subjected to governmental scrutiny appear to respond to powerful stakeholder demands and adopt sustainability management tools (Uhlaner et al., 2011). Lack of financial and human resources can impede the adoption of sustainability management tools in SMEs (Hillary, 2004) and are therefore most important in the acquisition of relevant knowledge. Since knowledge influences the application of sustainability management tools, considerable attention is needed to increase awareness in SMEs. Managers of SMEs need to be better informed on issues about the relevance of sustainability management tools; so that they can find pathways and opportunities to collect information about these tools (Hörisch et al., 2014; Talbot et al., 2021). Small and medium enterprises do not have adequate internal resources to survive hostility that emanates from external forces and are less likely to have access to media visibility. Aragon-Correa et al. (2008) explain that SMEs’ potential to implement proactive environmental practices is related to specific firms’ capabilities based on the unique strategic attributes of SMEs. These characteristics include shorter communication channels and closer interaction within the firm, better personal connections, flexibility in external associations, the presence of owner’s vision, a more focused culture and stronger identity and entrepreneurial orientation. Firms’ competitive advantage from these attributes lies in the managers’ vision and their ability to extend these views to the entire employees. As the theory of RBV posits that societal expectations and demands are part of the external forces that drive a firm to develop unique resources (tangible and intangible) to remain relevant to achieve its objective. Small and medium enterprises individually have, by deﬁnition, very limited operations, limited resources, limited expertise and therefore would not have the technical capability to report sustainability, to the same degree, as compared to very large firms (Parker et al., 2009; Aragon-Correa et al., 2008; Hussain & Merigo, 2023). Therefore, the extent of SR among other factors is determined by the firms’ resource capacity. Hence, RBV is a suitable theory to draw upon to espouse SR practices among SMEs.

## 3.0 Data and methods

The data for this study was collected through a cross-sectional survey with the administration of a fully standardized and structured questionnaire. This approach was adopted as it allows the collection of data from multiple SMEs at a single point in time, providing a notion on their views on sustainability reporting. The study focused on the primary data collection method to ensure the relevance and specificity of the findings to the SMEs context. The total population of the study consists of 592 firms belonging to the manufacturing and service industries. For the purpose of fair representation of the target population and minimization of sampling error or sampling bias, firms are sampled based on industrial affiliation using a simple random sampling technique (Ezeah and Roberts 2012). Yamane’s (1973) formula is employed to establish an adequate sample size. The formula is n=N/1+N(e)2 where: n = the sample size, N = the population, and e = the degree of error estimated at 5% for this study. The final sample consists of 239 firms belonging to manufacturing (98) and service (141). A face-to-face approach was chosen to establish a personal connection with the respondents and ensure clarity of questions. Out of the 239 questionnaires administered, only 188 were received. Five (5) were partially answered and thus deemed unusable. The final data set consisted of 183 fully answered questionnaires, representing a response rate of approximately 76%. This sample of SMEs is considered statistically significant, as it provides a representative subset of the target population. The response rate of approximately 76% of 239 SMEs is strong, indicating a high level of interest and engagement from the SMEs and this improves the reliability of the data collected.

The statistical software STATA was used to analyze the data into descriptive statistics, percentages, and frequencies and to generate relevant output tables. Measurement items within the questionnaire were designed with binary ‘Yes’ and ‘No’ responses, facilitating a clear understanding of SMEs’ SR practices. The extent of SR was evaluated through the computation of percentages. Motivations and barriers to SR were subjected through descriptive statistics, specifically, the minimum, maximum, mean and standard deviation. A t-test was applied to examine the mean significance. This allowed for the assessment of potential variations in motivations and barriers. The sample for the study was categorized according to the predominant business activities conducted by the Ghanaian SMEs. The peculiarity of the service and manufacturing sectors to national development agenda has been extolled in recent times in the context of Ghana. Table 3.1 provides an overview of the sample composition based on business type.

Table 3.1 Industrial affiliation of sampled firms.

|  |  |  |  |
| --- | --- | --- | --- |
| **Industry affiliation** | **Business type** | **Sampled firms** | **Percentage (%) of the sampled firms** |
|  | Hotels | 35 | 19.13% |
|  | Guesthouse | 20 | 10.92% |
| Service | Fuel and gas filling stations | 15 | 8.20% |
|  | Restaurant | 10 | 5.46% |
|  | Printing and publication  | 25 | 13.66% |
|  | Transportation | 4 | 2.19% |
|  | Mineral water | 15 | 8.20% |
|  | Alcoholic and Soft drinks  | 10 | 5.46% |
|  | Food products processing | 15 | 8.20% |
| Manufacturing | Pharmaceutical products | 4 | 2.19% |
|  | Herbal products | 12 | 6.56% |
|  | Cleaning & detergents  | 6 | 3.27% |
|  | Building materials | 12 | 6.56% |
| Total |  | **183** | **100** |

### Source: Authors’ computations from field data, 2021

**4.0 Analysis of Results**

This subsection dwells on the economic dimension of SR. Overall, the respondents are asked if their firms reported their economic impacts, of which 66.7% indicate they do, while 33.3% indicate they do not. This is an indication that SMEs largely report on the economic issues of their firms. This is reflected in the response to the other measurement items of the study. Most of the respondents agree that their firms report their revenues, operating costs, employee wages and benefits, and payments to the government. For community investments and financial assistance received from the government, however, only 48.6% and 47.5% (respectively) of the SMEs report on these. The extent of reporting on economic dimensions based on individual economic indicators is 65% which is very high.

Table 4.1 Economic Dimension

|  |  |  |
| --- | --- | --- |
| **Economic Indicators** | **Yes (%)** | **No (%)** |
| Revenues  | 142 (77.6%) | 41 (22.4%) |
| Operating costs  | 141 (77.0%) | 42 (23.0%) |
| Employee wages and benefits | 129 (70.5%) | 54 (29.5%) |
| Payments to Government | 123 (67.2%) | 60 (32.8%) |
| Community Investments | 89 (48.6%) | 94 (51.4%) |
| Financial Assistance received from government | 87 (47.5%) | 96 (52.5%) |
| Does your firm currently report its economic impacts? | 122 (66.7%) | 61 (33.3%) |
| Extent of economic reporting | **833 (65.0%)** | **448 (35.0%)** |

### Source: Authors’ computations from field data, 2021

For this subsection, the environmental dimension of sustainability is reported. From the results as presented in Table 5.2, it is clear that the majority of the SMEs do not report environmental issues. The respondents are specifically asked if they report on environmental impacts of their operations, and only 29.5% of the SMEs indicate they report their environmental impacts whiles a significant majority of 70.5% do not report. On the specific dimensions, 37.2% indicate they report on the details of fuel, electricity, heating, cooling, and steam consumptions. There are 29% of the SMEs which report on environmental protection expenditures, 27.3% report on waste and method of disposal, 24.6% report on renewable and non-renewable materials used, 19.7% report on electricity, heating, cooling, and steam sold, while 18.6% also report on reduction in energy consumption due to conservation. The extent of environmental reporting based on the individual environmental indicators is 26.5% which is relatively low.

Table 4.2 Environmental Dimension

|  |  |  |
| --- | --- | --- |
| **Environmental Indicators** | **Yes (%)** | **No (%)** |
| Fuel/electricity/heating/cooling/steam consumption | 68 (37.2%) | 115 (62.8%) |
| Environmental protection expenditures | 53 (29.0%) | 130 (71.0%) |
| Waste and method of disposal  | 50 (27.3%) | 133 (72.7%) |
| Renewable and non-renewable materials used  | 45 (24.6%) | 138 (75.4%) |
| Electricity/heating/cooling/steam sold | 36 (19.7%) | 147 (80.3%) |
| Reduction in energy consumption due to conservation  | 34 (18.6%) | 149 (81.4%) |
| Does your firm currently report its environmental impacts? | 54 (29.5%) | 129 (70.5%) |
| Extent of environmental reporting | **340(26.5%)** | **941 (73.5%)** |

### Source: Authors’ computations from field data, 2021

The last dimension of SR is the social dimension. Overall, the results presented in Table 5.3 indicate that only 26.2% of the SMEs report on the social impacts of their operations whiles a significant majority of 73.8% indicate that they do not report their social impact. Individually, it is established that 27.3% of the SMEs report on the benefits to full-time employees, 25.7% report on the health and safety employee training, 23.5% report on the equal remuneration of men and women, 22.4% report on the local community development programmes, 20.2% report on the stakeholder engagement plans, while only 18% report on the injury, injury rate, and occupational diseases rate within the firm. The extent of social reporting based on individual social indicators is 23.3% indicating a low level of social reporting.

**Table 4.3 Social Dimension**

|  |  |  |
| --- | --- | --- |
| **Social Indicators** | **Yes (%)** | **No (%)** |
| Benefits to full-time employees  | 50 (27.3%) | 133 (72.7%) |
| Health and Safety employee training  | 47 (25.7%) | 136 (74.3%) |
| Equal remuneration of men and women  | 43 (23.5%) | 140 (76.5%) |
| Local community development programmes  | 41 (22.4%) | 142 (77.6%) |
| Stakeholder engagement plans  | 37 (20.2%) | 146 (79.8%) |
| Injury/injury rate/occupational diseases rate  | 33 (18.0%) | 150 (82.0%) |
| Does your firm currently report its social impacts? | 48 (26.2%) | 135 (73.8%) |
| Extent of social reporting | **299 (23.3%)** | **982 (76.7%)** |

### Source: Authors’ computations from field data, 2021

Based on the specific relevant SR indicators on all the three dimensions, the overall results presented in Table 5.4 indicate that the extent of economic reporting among SMEs in Ghana is 65.0%, environmental reporting is 26.5% and social reporting is 23.3%. Furthermore, the overall extent of SR (economic, environmental and social) is 38.3%.

Table 4.4 Extent of Sustainability Reporting

|  |  |  |
| --- | --- | --- |
| **Dimension** | **Yes (%)** | **No (%)** |
| Economic | 833 (65.0%) | 448 (35.0%) |
| Environmental | 340 (26.5%) | 941 (73.5%) |
| Social | 299 (23.3%) | 982 (76.7%) |
| ***Overall extent of SR*** | ***1,472 (38.3%)*** | ***2,371 (61.7%)*** |

### Source: Authors’ computations from field data, 2021

From the results as present in Table 5.5, the overall mean score for managers knowledge on SR is 2.41, which is less than 3. This means that overall, the managers of the SMEs have poor knowledge of sustainability reporting. This implies that all six measurement items under this section are less favorably responded to. Results indicate that the owners/managers of the SMEs are not familiar with SR (economic dimension), not familiar with the term sustainability reporting, their firms have no sustainability policy, not familiar with SR (environmental dimension), education and training on sustainability concept are not regularly offered by the regulators, and they are not also familiar with SR (social dimension).

The t-test for the overall mean score of owner/manager knowledge and awareness on SR is significantly negative. This implies that, on the whole, manager’s knowledge of SR is very poor. Four out of the six measurement items under this section also have a negative significant t-test score, implying they are poorly rated. Although the other two measurement items also have a negative t-test score, this is not shown to be significant.

Table 4.5 Managers Knowledge and awareness

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Managers Knowledge and awareness** | **N** | **Min.** | **Max.** | **Mean** | **Std. Dev.** | **t-test (test value=3)** |
| I am familiar with SR (Economic dimension) | 183 | 1.00 | 5.00 | 2.91 | 1.62 | -0.78 |
| I am familiar with the term sustainable development | 183 | 1.00 | 5.00 | 2.86 | 1.26 | -1.53 |
| My organization has a sustainability policy. | 183 | 1.00 | 5.00 | 2.29 | 1.36 | -7.06\*\*\* |
| I am familiar with SR (Environmental dimension)  | 183 | 1.00 | 5.00 | 2.24 | 1.51 | -6.773\*\*\* |
| Education and training on Sustainability concept are regularly offered by the Regulator | 183 | 1.00 | 5.00 | 2.10 | 1.12 | -10.85\*\*\* |
| I am familiar with SR (Social dimension)  | 183 | 1.00 | 5.00 | 2.07 | 1.33 | -9.44\*\*\* |
| ***Overall*** | ***183*** | ***1.00*** | ***5.00*** | ***2.41*** | ***1.15*** | ***-6.94***\*\*\* |

\*\*\*Sig. at 1%; \*\*Sig. at 5%

### Source: Authors’ computations from field data, 2021

Table 5.6 indicates that there are significant or major barriers hindering SR among SMEs in Ghana. Five out of the eight measurement items under this section also show positive and significant t-test scores, two measurement items have a positive but statistically insignificant t-test score while one item has a negative t-test but statistically insignificant.

Table 4.6 Barriers of Sustainability Reporting

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Barriers**  | **N** | **Min.** | **Max.** | **Mean** | **Std. Dev.** | **t-test (test value=3)** |
| Resources constraints (finance and time) | 183 | 1 | 5 | 4.09 | 1.36 | 10.82\*\*\* |
| Lack of awareness and understanding | 183 | 1 | 5 | 3.77 | 1.38 | 7.56\*\*\* |
| Lack of expertise  | 183 | 1 | 5 | 3.69 | 1.41 | 6.65\*\*\* |
| Absence of legal requirements | 182 | 1 | 5 | 3.54 | 1.49 | 4.89\*\*\* |
| Lack of formal SR education and training  | 183 | 1 | 5 | 3.45 | 1.57 | 3.85\*\*\* |
| Negative ownership/managerial attitude | 183 | 1 | 5 | 3.07 | 1.48 | 0.60 |
| Lack of SR strategy | 183 | 1 | 5 | 3.04 | 1.50 | 0.39 |
| Lack of stakeholders’ pressure | 183 | 1 | 5 | 2.90 | 1.50 | -0.89 |
| ***Overall***  | ***183*** | ***1*** | ***5*** | ***3.44*** | ***1.11*** | ***5.39***\*\*\* |

\*\*\*Sig. at 1%; \*\*Sig. at 5%

### Source: Authors’ computations from field data, 2021

The results as presented in Table 5.7, only one measurement item has a mean score of above 3. Respondents agree that their firms sometimes report on sustainability issues just to meet legal obligations. The respondents disagree with the other seven measurement items as motivational factors for SR. It is established that the overall mean score for SR motivation has a significant negative t-test score. Implying there is no motivation for SR among SMEs in Ghana. One measurement item (to meet legal obligations) has a positive t-test score but this is statistically insignificant.

**Table 4.7 Motivations for Sustainability Reporting**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Motivations**  | **N** | **Min.** | **Max.** | **Mean** | **Std. Dev.** | **t-test (test value=3)** |
| To meet legal obligations | 183 | 1 | 5 | 3.16 | 1.56 | 1.37 |
| Desire to improve firms’ image and reputation | 182 | 1 | 5 | 2.77 | 1.31 | -2.38\*\* |
| To satisfy stakeholders expectations | 183 | 1 | 5 | 2.57 | 1.28 | -4.52\*\*\* |
| To survive and remain competitive | 183 | 1 | 5 | 2.52 | 1.28 | -5.07\*\*\* |
| To give back to the community | 183 | 1 | 5 | 2.43 | 1.17 | -6.61\*\*\* |
| To promote sustainability and good corporate citizenship | 183 | 1 | 5 | 2.39 | 1.17 | -7.03\*\*\* |
| Our competitors respond to social and environmental issues | 182 | 1 | 5 | 2.37 | 1.31 | -6.55\*\*\* |
| To promote employee loyalty and staff retention | 183 | 1 | 5 | 2.33 | 1.13 | -8.01\*\*\* |
| ***Overall***  | ***183*** | ***1*** | ***5*** | ***2.57*** | ***1.12*** | ***-5.24***\*\*\* |

\*\*\*Sig. at 1%; \*\*Sig. at 5%

### Source: Authors’ computations from field data, 2021

### 5.0 Discussions

The first objective seeks to examine the extent of SR among SMEs in Ghana using a survey. Using the extent of disclosure rating approach adopted by Arthur et al. (2017), the findings suggest that the economic dimension has the highest disclosure rate (65.0%), followed by the environmental dimension (26.5%) and social dimension (23.3%). The evidence also shows that it is only the economic reporting of the sampled firms that meet the critical threshold of 50%, the two other dimensions (environmental and social) are far below. The overall SR rating among SMEs in Ghana is 38.3% which is below the critical expected threshold. With the exception of the economic dimension, Arthur et al. (2017) find contrary evidence among large Ghanaian mining firms. The significant differences in findings may be a result of variation in the data. These results are not surprising since evidence from the study suggests that there is actually no motivation for SMEs in Ghana to engage in SR and few firms that do report are also confronted with obstacles such as resources constraints, lack of awareness and understanding, lack of expertise, absence of legal requirements, and lack of formal SR education and training. This evidence contradicts the findings of Arthur et al. (2017) who reveal a significant high SR rating and therefore conclude that the environment in Ghana which supports and favors sustainability disclosure practices has seen a remarkable improvement in recent years. This dissimilarity in findings may be as a result of the differences in the sample as the authors focus on large commercial mining firms while the current study focuses on SMEs.

An unanswered question whether managers of SMEs who the implementers of sustainability development are and reporting actually have knowledge or awareness of the sustainability concept continue to baffle the mind of many people. Knowledge and awareness have been identified in the literature as one of the critical resources that hinder SMEs from engaging in sustainability activities (Tauringana, 2020; Belal & Cooper, 2011). The results relating to this objective that specifically seeks to determine managers knowledge of SR show that lack of knowledge is a critical challenge in SMEs’ SR. This evidence is in line with the assertion of Bevan & Yung (2014) that awareness and knowledge level are positively related to environmental reporting. Lack of education and training on the sustainability concept has created an overwhelming lack of awareness among managers of Ghanaian SMEs about the practices involved in the concept of sustainability. Knowledge and awareness are the antecedent to persuasion, decision, implementation, and confirmation (Bevan & Yung, 2014). Managers need to systematically acquire and develop knowledge, attitude and skills to be able to implement the concept of sustainability. It is noted that a significant factor that could positively impact on knowledge is education and training (Aragon et al., 2014), however, this study reveals that the majority of the managers do not receive both education and training which have the efficacy of enhancing their knowledge for sustainability activities. These findings are consistent with similar results which are documented about SMEs’ sustainability knowledge and attitude in developed economies (Jabbour and Puppim-de-Oliveira 2012; Battisti and Perry 2011).

In this regard, it is expected that regulators in Ghana such as Environmental Protection Agency (EPA) would collaborate with trade associations and Metropolitan, Municipal and District Assemblies (MMDAs) to organize workshops and seminars on sustainability practices in order to improve managers’ SR knowledge. However, these regulators themselves are confronted with human resources challenges that hinder them to discharge their mandatory roles which include education and training, thus, contributing to the current situation. These findings may be viewed in the light of the doctrine of institutional theory, underlying institutional weakness appears to be a contributing factor for abysmal knowledge in SR practices among firms. Again, in line with the principle of RBV theory, which posits that SMEs individually have, by deﬁnition, very limited operations, limited resources and lack management resources to finance education and training programmes that could enhance their knowledge in the implementation of SR concept (Parker at al., 2009 and Aragon-Correa et al., 2008). Consistent with other empirical studies (Tauringana, 2020; Abor & Quartey, 2010) lack of education and training breed a lack of knowledge to adopt SR practices and improving SMEs’ knowledge in sustainability activities is potentially capable of contributing to how well SMEs embrace the SR concept in the future because knowledge significantly influences performance (Bryan, 2006; Yahya et al., 2012).

Stakeholder pressure, as well as the demand for sustainability disclosure, is missing in the context of SMEs in Ghana. The absence of these external pressures coupled with the presence of limited resources; managers of SMEs is highly uninterested in sustainability practices as they assume that the perceived costs far outweigh the perceived benefits. These findings are inconsistent with empirical evidence which posits that corporate entities are now facing increasing pressure to engage in SR to legitimize their existence in a society, gain reputation and avoid negative impacts of future demands of diverse stakeholders (Arthur et al., 2017).

The findings relating to barriers of SR reveal resources constraint acts as a significant barrier in SMEs’ sustainability uptake. Study respondents perceive limited resources, both finance and human as the main operational constraint impeding Ghanaian SMEs' sustainability initiatives. The general economic condition in Ghana coupled with high borrowing cost, high inflation, high fiscal deficit, government dependence on short-term finance from the local market are some of the critical factors which limit SMEs in accessing affordable finance. In other words, SMEs face the challenge of limited access to capital markets due to the perception of higher risk (Perez-Sanchez et al., 2003). In view of this, most of the SMEs resort to very high-interest rate funds from family and friends, and other microfinance institutions (Oppong-boakye et al. 2012) for their business operations. Ghanaian SMEs operating under these conditions may prioritize firms’ survival and profitability ahead of SR. Lack of financial resources as a constraint that plagues SMEs for engaging in SR is found by Seidel et al. (2008). According to Biondi & Iraldo (2002), managers will generally not consider embarking on investments that do not generate a substantial short-term financial benefit.

The results on the barriers to SR indicate that majority of respondents are unaware of the SR concept. Lack of awareness as a constraint that obstructs SMEs from engaging in SR is established by Tauringana (2020). For SMEs to successfully implement efficient SR initiatives, it is crucial for members of the firm to understand the policies and impacts of sustainability concept through participation in social and environmental awareness training aiming at producing enduring knowledge and commitment (Perron et al., 2006). These findings are consistent with the study by Johnson (2013).

Another challenge that serves as a barrier for SMEs SR is lack of expertise according to respondents. SMEs are likely to encounter peculiar difficulties in attracting and retaining qualified or skilled employees as they are inclined to engage less qualified workers (Perez-Sanchez et al., 2002) due to financial resource constraints as already noted. This evidence is similar to the results by Tauringana (2020) who identify lack of expertise as one of the key barriers for firms adopting SR in Uganda. A similar conclusion is drawn by Barber et al. (1989) who observe consistent evidence of lack of managerial training, relatively low-level credentials and poor competence associated with SMEs SR. In the view of respondents, the absence of legal requirements is another significant barrier that obstructs SMEs from engaging in the SR. These findings are consistent with the evidence of Tauringana (2020) identifying lack of legal requirement as a key barrier for non-adopting of SR among Ugandan firms. Ghana is noted for the weak and poor legal structure that leads to a lower priority for legal responsibility. For instance, emitting pollution firms may not incur regulatory fines, sanctions and legal fees which may affect their performance and compel them to engage or improve their sustainability activities (Christmann 2000; Earnhart and Lizal 2010).

To achieve the high commitment of SMEs to engage in best sustainability practices, regulators in Ghana such as MMDAs and EPA should prescribe acceptable standards and guidelines which are in line with internationally accepted best practices and also embark on extensive public awareness creation about the socio-economic benefits of firms’ sustainability activities through formal and informal education, training, workshops and seminars since lack of SR education and training prove to be a significant barrier to SMEs to fully comprehend sustainability practices. In this regard, SMEs will have to legitimize their existence and survival in accordance with legitimacy theory. However, the lack of stakeholders’ pressure is not considered as a barrier to SR. The explanation for this may be that, unlike the western world where there exists stronger stakeholders’ protection, developing countries like Ghana’s environment is characterized with weak stakeholders’ protection where the satisfaction of the majority of stakeholders become a secondary consideration by the firm.

The results relating to motivation for SR indicates that meeting legal obligation is a factor that influences SMEs managers decision to engage in SR. Interestingly, this is a surprising revelation given that sustainability disclosures are not mandatory in Ghana. These unexpected results may be due to the fact that SMEs in the manufacturing sector are sometimes forced by the regulators (EPA and MMDAs) in accordance with the EPA Act (Act 490) to follow standards and guidelines to minimize the impact of their operations on the environment. For manufacturing SMEs failure to take measures against environmental pollution and degradation including the control of toxic substances and discharge of waste sometimes lead to the payment of penalties and fines as well as forced closure of business premises by these regulators.

Findings suggest that owners/managers do not perceive other factors to influence their SR. It is interesting to note that in developing countries like Ghana, unlike the western world where markets environment is efficient, formalized with strong systems, legislation and enforcement mechanisms, there exist infant market environment of developing countries, which are characterized by weak systems, loose regulation, and poor institutional governance structures coupled with corruption, poverty, and weak stakeholder power. It is documented that country contexts with varied environmental, economic, social and institutional dimensions may probably affect firm SR practices (Ramos et al., 2013). Findings show that SMEs in Ghana have no motivation to engage in SR. It is noted that the activities of owners/managers of SMEs related to financial and other business issues are shielded in much secrecy and engaging in sustainability disclosures will expose them to public scrutiny. According to the doctrines of RBV, the decision to adopt SR depends on the resources capacity and SMEs’ potential to implement proactive sustainability practices is related to specific firms’ capabilities based on the unique strategic attributes of SMEs (Aragon-Correa et al., 2008). However, SMEs have very limited operations, limited resources, limited expertise and technically incapacitated and therefore would not have any motivation to adopt sustainability practices despite the seemly benefits associated with the disclosures (Parker at al., 2009 and Aragon-Correa et al., 2008.

## 6.0 Conclusion

This paper examines the impact of SME managers attributes on sustainability reporting (SR) among SMEs in Ghana. The results of the extent of SR among SMEs in Ghana suggest that the economic dimension has the highest disclosures, followed by the environmental dimension and social dimension. The evidence also shows that it is only the economic reporting of the sampled firms that meet the critical threshold of 50%, the two other dimensions (environmental and social) are far below. The overall SR rating among SMEs in Ghana is 38.3% which is below the critical expected threshold.

The findings relating to barriers of SR reveal that resources constraint acts as a significant barrier in SMEs’ sustainability uptake. Limited resources, both finance and human are the main operational constraint impeding Ghanaian SMEs' sustainability initiatives and reportage. The general economic condition in Ghana coupled with high borrowing costs, high inflation, government fiscal deficit, government dependence on short-term finance from the local market are some of the critical factors which limit SMEs in accessing affordable funds which negatively affect their sustainability initiatives as they perceive that to be capital intensive. Lack of awareness and understanding, lack of expertise and absence of legal requirements are all viewed as significant barriers to SR. However, lack of stakeholders’ pressure is not found to be a major barrier. The study further reveals that SMEs in Ghana have no motivation to engage in SR. It is an open revelation that Ghanaian SMEs have very limited operations, limited resources, limited expertise and technically incapacitated and therefore would not have any motivation to adopt sustainability practices despite the seemly benefits associated with the disclosures.

With regards to SME managers' knowledge and awareness, lack of education and training on the sustainability concept has created an overwhelming lack of awareness among managers of Ghanaian SMEs about the practices involved in accounting for sustainability. Managements of SMEs have insufficient knowledge about the data collection processes and guidelines for SR. Managers' inability to systematically acquire and develop knowledge, attitudes and skills lead to a poor level of implementation of the sustainability concept. Evidence suggests that the majority of the managers do not have either education or training which has the efficacy of enhancing their knowledge for sustainability activities. Education and training improve knowledge and are consequently associated positively with firm performance. It is evidenced that, knowledge about incorporation and managing sustainability practices in the business of SMEs is poor with low seminars and workshops in Ghana.

This study is not free from some latent limitations despite its new contributions for policy and managerial directions. First, the study uses a closed-ended questionnaire to solicit responses from respondents for data analysis. Such a method acknowledges the presence of inherent problems of not permitting respondents to explicitly express their own views as they may want (Griffith et al., 1999). Another limitation is that the questionnaire is answered by a single individual (Yusuf & Saffu, 2005) either owner-manager or employee manager in each firm. Therefore, the information provided may reflect the knowledge and perception of such individuals (Tauringana, 2020) which may differ from reality and there is no alternative source such as financial and other stand-alone reports for verification and confirmation. However, it is argued that sustainability practices are discretionary strategic choices of the top management, hence, they are well placed to provide needed responses. Also, to increase the depth of information, future research should consider employing semi-structured questionnaires instead of a close-ended questionnaire to solicit views from respondents. Further, to deduce an alternative approach to verify and confirm the validity and reliability of the answers provided by a single individual of each firm, for example, an interview can be conducted to solicit experts’ opinions on the subject matter and results compared with responses obtained from the firms.

Second, the analysis is constrained to the context of firms in Ghana. It is acknowledged that, the small sample size, time and limited geographical (Haniffa & Cooke, 2005; Dey et al., 2018; Tauringana, 2020) place a challenge on the empirical generalizability of the results to SMEs in general. It is therefore recommended that future research should expand the scope to other countries to permit generalization of research findings.

**References**

Abor, J., & Quartey, P. (2010). Issues in SME development in Ghana and South Africa. International Research Journal of Finance and Economics, 39(39), 218–228.

Afolabi, H., Ram, R., Hussainey, K., Nandy, M., & Lodh, S. (2023). Exploration of small and medium entities’ actions on sustainability practices and their implications for a greener economy. *Journal of Applied Accounting Research*, *24*(4), 655–681. https://doi.org/10.1108/JAAR-09-2022-0252

Amoako, K.O., Amoako, I.O., Tuffour, J. & Marfo, E.O. (2021). Formal and informal sustainability reporting: an insight from a mining company’s subsidiary in Ghana. *Journal of Financial Reporting and Accounting*, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/JFRA-12-2020-0368

Amran, A., & Haniffa, R. (2011). Evidence in development of sustainability reporting: a case of a developing...: UMUC Library OneSearch: Business & Management. *Business Strategy and the Environment*, *20*(3), 141–156. http://eds.a.ebscohost.com.ezproxy.umuc.edu/eds/pdfviewer/pdfviewer?vid=25

Amran, A., Lee, S. P., & Devi, S. S. (2014). The influence of governance structure and strategic corporate social responsibility toward sustainability reporting quality. *Business Strategy and the Environment*, *23*(4), 217–235. https://doi.org/10.1002/bse.1767

Amran, A., Ooi, S. K., Mydin, R. T., & Devi, S. S. (2015). The Impact of Business Strategies on Online Sustainability Disclosures. 564(December 2013), 551–564. https://doi.org/10.1002/bse.1837

Aragón-Correa, J. A., Hurtado-Torres, N., Sharma, S., & García-Morales, V. J. (2008). Environmental strategy and performance in small firms: A resource-based perspective. *Journal of Environmental Management*, *86*(1), 88–103. https://doi.org/10.1016/j.jenvman.2006.11.022

Arthur C. L, Wu J, Yago M, Zhang J. (2017). "Investigating performance indicators disclosure in sustainability reports of large mining companies in Ghana", Corporate Governance: The International Journal of Business in Society.

Barba-Aragón, M.I., Jiménez-Jiménez, D. and Sanz-Valle, R. (2014), “Training and performance: the mediating role of organizational learning”, BRQ Business Research Quarterly, Vol. 17 No. 3, pp. 161-173.

Barney, J. (1991). Firm Reources ad Sustained Competitive Advantege. In *Journal of Management* (Vol. 17, Issue 1, pp. 99–120).

Battisti, M., Perry, M. 2011. Walking the talk? Environmental responsibility from the perspective of small-business owners. Corporate Social Responsibility and Environmental Management. 18 (3): 172-185

Belal, A. R., & Cooper, S. (2011). The absence of corporate social responsibility reporting in Bangladesh. Critical Perspectives on Accounting, 22(7), 654–667. https://doi.org/10.1016/j.cpa.2010.06.020

Belal, A. R., & Owen, D. L. (2007). The views of corporate managers on the current state of, and future prospects for, social reporting in Bangladesh: An engagement-based study. *Accounting, Auditing and Accountability Journal*, *20*(3), 472–494. https://doi.org/10.1108/09513570710748599

Bevan, E. A. M., & Yung, P. (2015). Implementation of corporate social responsibility in Australian construction SMEs. Engineering, Construction and Architectural Management, 22(3), 295–311. https://doi.org/10.1108/ECAM-05-2014-0071

Boakye, D. J., Tingbani, I., Ahinful, G. S., & Nsor-Ambala, R. (2021). The relationship between environmental management performance and financial performance of firms listed in the Alternative Investment Market (AIM) in the UK. *Journal of Cleaner Production*, *278*, 124034. https://doi.org/10.1016/j.jclepro.2020.124034

Brundtland Commission (1987). Our common future. Oxford University Press, Oxford, UK.

Bryan, J. (2006). Training and performance in small firms. International Small Business Journal, 24, pp. 635–660.

Bunclark L. and Barcellos-Paula l. (2021). “Sustainability reporting for sustainable supply chain management in Peru,” Sustain. Prod. Consum., vol. 27, pp. 1458-1472, 2021, doi: 10.1016/j.spc.2021.03.013

Burton, B. K., Farh, J.-L. L., & Hegarty, W. H. (2011). A Cross-Cultural Comparison of Corporate Social Responsibility Orientation: Hong Kong vs. United States Students. *SSRN Electronic Journal*, *February*, 151–167. https://doi.org/10.2139/ssrn.1007364

Carmo, C., & Miguéis, M. (2022). Voluntary Sustainability Disclosures in Non-Listed Companies: An Exploratory Study on Motives and Practices. *Sustainability (Switzerland)*, *14*(12), 1–22. https://doi.org/10.3390/su14127365

Carroll B., A. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, *34*(4), 39–48.https://www.researchgate.net/publication/4883660\_The\_Pyramid\_of\_Corporate\_Social\_Responsibility\_Toward\_the\_Moral\_Management\_of\_Organizational\_Stakeholders

Chen J. J. & Chambers D. (1999) Sustainability and the impact of Chinese policy initiatives upon construction, Construction Management & Economics, 17:5, 679-687, DOI: 10.1080/014461999371286

Cristian, D., Maria, L., Artene, A., & Duran, V. (2015). The components of sustainable development - a possible approach. 26(15), 806–811. <https://doi.org/10.1016/S22125671> (15)00849-7

Crossley, R. M., Elmagrhi, M. H., & Ntim, C. G. (2021). Sustainability and legitimacy theory: The case of sustainable social and environmental practices of small and medium-sized enterprises. *Business Strategy and the Environment*, *30*(8), 3740–3762. https://doi.org/10.1002/bse.2837

Darcy, C., Hill J., McCabe T., McGovern, P. (2014). A Consideration of Organizational Sustainability in the SME Context. European Journal of Training and Development 38 (5), 398 -414.

Dartey-Baah, K., & Amponsah-Tawiah, K. (2011). Exploring the limits of Western Corporate Social Responsibility Theories in Africa. *International Journal of Business and Social Sciences*, *2*(18), 126–137.

Dias, A., Rodrigues, L. L., Craig, R., & Neves, M. E. (2018). Corporate social responsibility disclosure in small and medium sized entities and large companies. Social Responsibility Journal, 15(2), 137–154. <https://doi.org> 10.1108/SRJ-05-2017-0090

Dienes, D., Sassen, R., & Fischer, J. (2016). What are the drivers of sustainability reporting? A systematic review. *Sustainability Accounting, Management and Policy Journal*, *7*(2), 154–189. https://doi.org/10.1108/SAMPJ-08-2014-0050

Dissanayake, D., Tilt, C., & Xydias-Lobo, M. (2016). Sustainability reporting by publicly listed companies in Sri Lanka. Journal of Cleaner Production, 129, 169–182. https://doi.org/10.1016/j.jclepro.2016.04.086

Dragomir, V. D. (2012). The disclosure of industrial greenhouse gas emissions: A critical assessment of corporate sustainability reports. *Journal of Cleaner Production*, *29*–*30*, 222–237. https://doi.org/10.1016/j.jclepro.2012.01.024

Ebiringa, O. T., Yadirichukwu, E., Chigbu, E. E., & Ogochukwu, O. J. (2013). *Effect of Firm Size and Profitability on Corporate Social Disclosures : The Nigerian Oil and Gas sector in Focus*. *3*(4), 563–574.

Eccles R, Ioannou I, Serafeim G. (2012). The impact of corporate sustainability on organizational processes and performance. Working paper, Harvard Business School, Harvard University, Boston, MA.

Elkington, J. (Ed.) (1997), Cannibals with Forks: The Triple Bottom Line of 21st Century Business, Capstone, Oxford.

Galli, D., Torelli, R., & Caccialanza, A. (2023). Sustainability performance and sustainability reporting in SMEs: A love affair or a fight? *Journal of Management and Organization*. https://doi.org/10.1017/jmo.2023.40

George, C., & Kirkpatrick, C. (2003). Impact Assessment Research Centre Sustainability Impact Assessment of World Trade Negotiations: Current Practice and Lessons for Further Development. 1–30.

Gilman S. (2003) Sustainability and national policy in UK port development, Maritime Policy & Management, 30:4, 275-291, DOI: 10.1080/03088830 32000145591

Goyal, P., Rahman, Z., & Kazmi, A. A. (2013). Corporate sustainability performance and firm performance research Literature review and future research agenda. 51(2), 361–379. https://doi.org/10.1108/00251741311301867

Griffith LE, Cook DJ, Guyatt GH, Charles CA. Comparison of open and closed questionnaire formats in obtaining demographic information from Canadian internists. J Clin Epidemiol 1999;52(10):997—1005.

Hahn, R., & Kühnen, M. (2013). Determinants of sustainability reporting: a review of results, trends, theory, and opportunities in an expanding field of research. Journal of Cleaner Production, 59, 5–21. <https://doi.org/10.1016/j> .jclepro.2013.07.005

Hasan, M. N. (2016). Measuring and understanding the engagement ofBangladeshi SMEs with sustainable and socially responsible businesspractices: An ISO 26000 perspective. Social Responsibility Journal, 12(3), 584–610. https://doi.org/10.1108/SRJ‐08‐2015‐0125

Hillary, R. (2004). Environmental management systems and the smaller enterprise. *Journal of Cleaner Production*, *12*(6), 561–569. https://doi.org/10.1016/j.jclepro.2003.08.006

Ho, L. J., & Taylor, M. E. (2007). *An Empirical Analysis of Triple Bottom-Line Reporting and its Determinants : Evidence from the United States and Japan*.

Holden, E., Linnerud, K., & Banister, D. (2014). Sustainable development: Our Common Future revisited. Global Environmental Change, 26, 130–139. https://doi.org/10.1016/j.gloenvcha.2014.04.006

Hörisch, J., Johnson, M. P., & Schaltegger, S. (2015). Implementation of Sustainability Management and Company Size: A Knowledge-Based View. *Business Strategy and the Environment*, *24*(8), 765–779. https://doi.org/10.1002/bse.1844

Hossain, M. M., Alam, M., Islam, M. A., & Hecimovic, A. (2015). Do stakeholders or social obligations drive corporate social and environmental responsibility reporting? Managerial views from a developing country. *Qualitative Research in Accounting and Management*, *12*(3), 287–314. https://doi.org/10.1108/QRAM-10-2014-0061

Hussain, W., & Merigo, J. M. (2023). Onsite/offsite social commerce adoption for SMEs using fuzzy linguistic decision making in complex framework. *Journal of Ambient Intelligence and Humanized Computing*, *14*(9), 12875–12894. https://doi.org/10.1007/s12652-022-04157-5

Ismaeel, M. and Zakaria, Z. (2020), “Perception of preparers of sustainability reports in the Middle East”, Meditari Accountancy Research, Vol. 28 No. 1, pp. 89-116

Jabbour, C. J. C., and J. A. Puppim-de-Oliveira. 2012. “Barriers to Environmental Management in Clusters of Small Businesses in Brazil and Japan: From a Lack of Knowledge to a Decline in Traditional Knowledge.”International Journal of Sustainable Development & World Ecology 19 (3):247–257

Jones, P., Comfort, D., Hillier, D., & Eastwood, I. (2005). Retailers and sustainable development in the UK. 33(3), 207–214. <https://doi.org/10.1108/09590> 550510588370

Kent, P., & Monem, R. (2008). What drives TBL reporting: Good governance or threat to legitimacy? *Australian Accounting Review*, *18*(4), 297–309. https://doi.org/10.1111/j.1835-2561.2008.0036.x

Khan, M., Lockhart, J., & Bathurst, R. (2020). A multi-level institutional perspective of corporate social responsibility reporting: A mixed-method study. Journal of Cleaner Production, 265, 121739. <https://doi.org/10.1016/j.jclepro> .2020.121739

Khasharmeh, H. (2010). *Social responsibility disclosure in corporate annual reports : evidence from the Gulf Cooperation Council countries Mishiel Said Suwaidan \**. *6*(4).

Lozano, R., & Huisingh, D. (2011). Inter-linking issues and dimensions in sustainability reporting. *Journal of Cleaner Production*, *19*(2–3), 99–107. https://doi.org/10.1016/j.jclepro.2010.01.004

Mac and Bhaird, C., Lucey, B. (2010). Determinants of capital structure in Irish SMEs. Small Bus. Econ. 35 (3), 357–375.

Mazzi, A., Mason, C., Mason, M., & Scipioni, A. (2012). Is it possible to compare environmental performance indicators reported by public administrations? Results from an Italian survey. *Ecological Indicators*, *23*, 653–659. https://doi.org/10.1016/j.ecolind.2012.05.006

Mikkilä, M., & Toppinen, A. (2008). Corporate responsibility reporting by large pulp and paper companies. *Forest Policy and Economics*, *10*(7–8), 500–506. https://doi.org/10.1016/j.forpol.2008.05.002

Mitchell, C. G., & Hill, T. (2009). Corporate social and environmental reporting and the impact of internal environmental policy in South Africa. *Corporate Social Responsibility and Environmental Management*, *16*(1), 48–60. https://doi.org/10.1002/csr.179

Mondal A., Prasad R. & Bauri S. (2021). An empirical study in sustainability reporting practices of Indian small and medium-sized enterprises. Journal of Commerce & Accounting Research 10 (1) 2021, 67-76http://publishingindia. com/jcar/

Nwobu, O.A., Iyoha, F. and Owolabi, A. (2018), “Managerial perceptions of corporate sustainability reporting determinants in Nigeria’, Journal of Business and Retail Management Research, Vol. 12 No. 2, pp. 72-82.

Ofori, D. F., & Hinson, R. E. (2007). Corporate social responsibility (CSR) perspectives of leading firms in Ghana. *Corporate Governance*, *7*(2), 178–193. https://doi.org/10.1108/14720700710739813

Orazalin, N., & Mahmood, M. (2018). Economic , environmental , and social performance indicators of sustainability reporting : Evidence from the Russian oil and gas industry. *Energy Policy*, *121*(January), 70–79. https://doi.org/10.1016/j.enpol.2018.06.015

Ortiz-Martínez, E., Marín-Hernández, S., & Santos-Jaén, J. M. (2023). Sustainability, corporate social responsibility, non-financial reporting and company performance: Relationships and mediating effects in Spanish small and medium sized enterprises. *Sustainable Production and Consumption*, *35*, 349–364. https://doi.org/10.1016/j.spc.2022.11.015

Parker, C. M., Redmond, J., & Simpson, M. (2009). A review of interventions to encourage SMEs to make environmental improvements. Environment and Planning C: Government and Policy, 27(2), 279–301. <https://doi.org/10> .1068/c0859b

Parnell, S. (2016). Defining a Global Urban Development Agenda. World Development, 78, 529–540. <https://doi.org/10.1016/j.worlddev>. 2015.10.028

Perez-Sanchez, D., Barton, J. R. and Bower, D. (2003), 'Implementing Environmental Management in SMEs', Corporate Social Responsibility and Environmental Management, 10: pp. 67-77.

Pobbi, M., Anaman, E.A., & Quarm, R. S. (2020). Corporate Sustainability Reporting: Empirical Evidence From Ghana. *Journal of Economics and Business*, Vol.3(3), Available at SSRN: [https://ssrn.com/abstract=3649396](https://ssrn.com/abstract%3D3649396)

Rahaman, A. S. (2000). Senior management perceptions of social and environmental reporting in Ghana. *Social and Environmental Accountability Journal*, *20*(1), 7–10. https://doi.org/10.1080/0969160X.2000.9651625

Ramos, T. B., Cecílio, T., Douglas, C. H., & Caeiro, S. (2013). Corporate sustainability reporting and the relations with evaluation and management frameworks: The Portuguese case. Journal of Cleaner Production, 52, 317–328. https://doi.org/10.1016/j.jclepro.2013.03.002

Rizk, R., Dixon, R., & Woodhead, A. (2008). *Corporate social and environmental reporting : a survey of disclosure practices in Egypt*. *4*(3), 306–323. https://doi.org/10.1108/17471110810892839

Roca, L. C., & Searcy, C. (2012). An analysis of indicators disclosed in corporate sustainability reports. *Journal of Cleaner Production*, *20*(1), 103–118. https://doi.org/10.1016/j.jclepro.2011.08.002

Rodríguez-Gutiérrez, P., Guerrero-Baena, M. D., Luque-Vílchez, M., & Castilla-Polo, F. (2021). An approach to using the best-worst method for supporting sustainability reporting decision-making in SMEs. *Journal of Environmental Planning and Management*, *64*(14), 2618–2640. https://doi.org/10.1080/09640568.2021.1876003

Said, R., Zainuddin, Y. H., & Haron, H. (2009). The relationship
between corporate social responsibility disclosure and corporate
governance characteristics in Malaysian public listed companies.
Social Responsibility Journal, 5, 212-2

Sakshi, S., Cerchione, R., & Bansal, H. (2020). Measuring the impact of sustainability policy and practices in tourism and hospitality industry. Business Strategy and the Environment, 29, 1109–1126

Sotorrío, L. L., & Sánchez, J. L. F. (2010). Corporate social reporting for different audiences: The case of multinational corporations in Spain. *Corporate Social Responsibility and Environmental Management*, *17*(5), 272–283. https://doi.org/10.1002/csr.215

Steinhöfel, Erik, Mila Galeitzke, Holger Kohl, and Ronald Orth. (2019). Sustainability Reporting in German Manufacturing SMEs. Procedia Manufacturing 33: 610–17.

Sulaiman, M., Abdullah, N., Fatima, A. H., Sciences, M., Gombak, J., Lumpur, K., Campus, G. B., & Terengganu, K. (2014). *Determinants Of Environmental Reporting*. *1*(1), 63–90.

Talbot, D., Raineri, N., & Daou, A. (2021). Implementation of sustainability management tools: The contribution of awareness, external pressures, and stakeholder consultation. *Corporate Social Responsibility and Environmental Management*, *28*(1), 71–81. https://doi.org/10.1002/csr.2033

Tauringana, V. (2020). *Sustainability reporting challenges in developing countries : towards management perceptions research evidence-based practices*. *2019*. https://doi.org/10.1108/JAEE-01-2020-0007

Uhlaner, L. M., Berent-Braun, M. M., Jeurissen, R. J. M., & de Wit, G. (2012). Beyond Size: Predicting Engagement in Environmental Management Practices of Dutch SMEs. *Journal of Business Ethics*, *109*(4), 411–429. https://doi.org/10.1007/s10551-011-1137-x

Veleva, V., Hart, M., Greiner, T., & Crumbley, C. (2003). Indicators for measuring environmental sustainability: A case study of the pharmaceutical industry. *Benchmarking*, *10*(2), 107–119. https://doi.org/10.1108/14635770310469644

Villiers, C. J. De. (2003). Why do South African companies not report more environmental information when managers are so positive about this kind of reporting ? 11, 11–23.

Visser, B. W. (2003). *Corporate Responsibility in a Developing Country Context*. *20*, 1–3.

Wernerfelt B. (1984). A resource-based view of the firm. Strategic Management Journal 5(2): 171–180.

Wilmshurst, T. D., & Frost, G. R. (2000). *Corporate environmental reporting A test of legitimacy theory*. *13*(1), 10–26.

Yahya, A. Z., Othman, M. S. and Shamsuri, A. L. S. (2012). The impact of training on small and medium enterprises, SMEs performance. Journal of Professional Management, 2(1): 15-25.

Yusuf, A., Saffu, K., 2005. Planning and performance of small and medium enterprise operators in a country in transition. Journal of Small Business Management 43 (4), 480–497.

Zhao, N., & Patten, D. M. (2016). An exploratory analysis of managerial perceptions of social and environmental reporting in China: Evidence from state-owned enterprises in Beijing. *Sustainability Accounting, Management and Policy Journal*, *7*(1), 80–98.