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Driving SME Success through EMA Practices: An Analysis in Chenkalady DS Division of Batticaloa

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Abstract

This study examines the impact of Environmental Management Accounting (EMA) practices on the performance of Small and Medium Enterprises (SMEs) in the Chenkalady DS Division of Batticaloa, Sri Lanka. SMEs are crucial for economic growth and innovation but often face challenges in adopting sustainable practices while maintaining competitiveness. This research investigates how the integration of environmental costs into business operations through EMA influences the financial and operational performance of SMEs. Using a stratified random sampling approach, the study selects a representative sample of SMEs from the agriculture, manufacturing, and services sectors. Data are collected through a structured questionnaire that captures information on EMA implementation, financial performance, and non-financial performance indicators. Descriptive and inferential statistical methods are used to assess the relationship between EMA practices and SME performance. It reveals a gender disparity in ownership, with 66% male and 34% female ownership, and highlights the service sector's dominance. Findings indicate moderate to strong EMA adoption. particularly in evaluating environmental performance and cost-saving. EMA positively impacts financial performance, though tracking financial benefits and compliance remains low. Recommendations include better financial tracking, compliance, and employee training, with future research exploring barriers and expanding to other regions.

Key Words: Environmental Management Accounting, Small and Medium Enterprises, Financial performance, sustainable practices.

Introduction

Environmental Management Accounting (EMA) practices have become increasingly important as businesses worldwide strive to balance economic growth with environmental sustainability. By incorporating environmental costs into traditional accounting systems, EMA provides a holistic understanding of the financial implications of environmental activities (Burritt & Schaltegger, 2010). For resource-constrained Small and Medium Enterprises (SMEs), which play a vital role in economic development, EMA adoption can drive significant change. This study examines the impact of EMA practices on SME performance in the Chenkalady DS Division of Batticaloa, a region with a high concentration of SMEs that contribute substantially to the local economy.

Sri Lankan SMEs, spanning agriculture, manufacturing, and services, play a pivotal role in economic diversity and innovation, contributing over 52% to GDP, 45% to employment, and representing 75% of enterprises (Ministry of Industry and Commerce, 2015). Despite their significance, these SMEs face challenges such as limited capital, technological constraints, and regulatory pressures to adopt sustainable practices (Wijethilake, 2017). Environmental Management Accounting (EMA) offers a potential solution, enabling SMEs to manage environmental costs, improve efficiency, and enhance sustainability (Bennett et al., 2002). While prior research highlights EMA's benefits for larger corporations, its impact on SMEs, especially in developing countries like Sri Lanka, remains underexplored (Christ & Burritt, 2019). This study addresses this gap by examining the adoption and effects of EMA practices among SMEs in the Chenkalady DS Division of Batticaloa, an economic hub with diverse industries.

How to Cite this Article:

Pushpakaran, K. (2024). Driving SME Success through EMA Practices: An Analysis in Chenkalady DS Division of Batticaloa. The International Journal of Commerce Management and Business Law in International Research, 1(2), 1–7. https://doi.org/10.5281/zenodo.14634315 It seeks to provide empirical evidence on how EMA enhances financial performance, operational efficiency, and competitiveness, offering valuable insights for SME stakeholders and policymakers to drive sustainable growth.

SMEs in the Chenkalady DS Division of Batticaloa play a vital role in economic development but face challenges in competitiveness and sustainability, particularly under increasing environmental regulations. Despite the potential of Environmental Management Accounting (EMA) to enhance financial performance and operational efficiency, empirical research on its impact in this context is limited. This study investigates how EMA practices influence SMEs' performance, offering insights to help them achieve economic and environmental objectives for long-term success. This study aims to assess the extent of EMA practices among SMEs and their relationship with financial performance. Additionally, the study will evaluate the overall impact of EMA practices on the financial performance of SMEs.

This study on the impact of Environmental Management Accounting (EMA) practices in SMEs in the Chenkalady DS Division of Batticaloa contributes to academia, industry, and policy-making. It fills a gap in the literature by providing empirical evidence on the relationship between EMA and SME performance in a developing country context. The study offers practical insights for SME owners and managers on integrating environmental costs into accounting processes to improve efficiency and sustainability. It also highlights the need for supportive policies to encourage EMA adoption, fostering a sustainable business environment.

Literature Reviews

Environmental Management Accounting (EMA) is a branch of accounting that focuses on the internal costs associated with environmental sustainability. It involves identifying, collecting, analyzing, and utilizing both physical and financial data to improve both environmental and financial performance. According to Burritt et al. (2002), EMA provides a framework that integrates environmental and economic information to support decision-making processes. Key components of EMA include environmental cost accounting, lifecycle costing, and full cost accounting, which are vital for evaluating the environmental impact and economic feasibility of business operations (Jasch, 2003). Bebbington and Larrinaga-González (2021) examine EMA's impact on sustainable development, emphasizing its role in enhancing corporate environmental strategies, improving resource efficiency, and promoting longterm sustainability. They highlight the importance of integrating EMA into broader organizational frameworks to achieve sustainable development goals.

Small and Medium Enterprises (SMEs) are essential to the global economy, particularly in developing countries, where they contribute significantly to employment, GDP, and local development. Characterized by small-scale operations and limited resources, SMEs account for about 90% of businesses and over 50% of employment worldwide (World Bank, 2020). They are vital for economic growth, innovation, and poverty alleviation, especially in emerging markets, where they provide essential goods and services (Ayyagari, Beck, & Demirguc-Kunt, 2007). In Sri Lanka, an SME is defined as a business with fewer than 300 employees and an annual income not exceeding 750 million LKR (Central Bank of Sri Lanka, 2017). SMEs drive innovation, create jobs, and foster economic growth, making them a cornerstone of the economy.

Bennett and James (2020) conducted a systematic literature review on Environmental Management Accounting (EMA) in SMEs. highlighting its benefits, such as cost savings through efficiency, improved environmental resource performance, and increased competitiveness. The review also proposes a research agenda to explore the challenges and opportunities of implementing EMA in SMEs, emphasizing its role in promoting sustainable business practices and economic resilience. Similarly, Huang, et al (2024) reviewed EMA's role in SMEs, focusing on how these practices contribute to better environmental performance, cost reduction, and sustainability. The review suggests further research to address gaps in understanding, particularly in adapting EMA tools to meet the unique needs and constraints of SMEs.

Li, Wu, and Hu (2023) conducted a systematic review examining the challenges faced by small and medium-sized enterprises (SMEs) in adopting Environmental Management Accounting (EMA) practices. The review identifies common barriers, including limited financial resources, low environmental awareness, complex implementation processes, and insufficient expertise and training. It offers insights into how these challenges hinder EMA adoption in SMEs and proposes strategies to overcome them. SMEs often struggle with limited financial and human resources, making it challenging to invest in the tools and expertise needed for successful EMA implementation (Jamil et al., 2015).

There is a significant gap in understanding the impact of Environmental Management Accounting (EMA) practices on Small and Medium Enterprises (SMEs) in Sri Lanka, as most studies focus on large firms or SMEs in developed countries. Limited research exists on the barriers and drivers for EMA adoption in Sri Lankan SMEs, and sector-specific insights are lacking. Longitudinal studies and comparative analyses between EMA adopters and non-adopters are needed to better understand the longterm effects of EMA practices on SME performance in Sri Lanka.

Methodology

The study focuses on SMEs in the Chenkalady DS Division of Batticaloa District, covering agriculture, manufacturing, and services. Using a stratified random sampling method, 50 SMEs will be selected from a population of 1,037 to ensure sectoral representation. Data collection will involve a structured questionnaire measuring EMA practices, financial performance, and non-financial indicators, with Likert-scale questions capturing quantitative data. Surveys will be distributed digitally via WhatsApp and email, with paper copies provided for those without online access, and follow-up reminders will improve response rates.

Descriptive statistics will summarize demographic characteristics and EMA practices, while inferential methods. Further univariate, and bivariate analyses, will evaluate EMA's impact on the performance of SMEs. Statistical techniques like correlation analysis will also be applied, using SPSS-22 and MS Excel-2019 for accurate and reliable results.

Analysis and Discussion

This part covers both descriptive and inferential statistics for the demographic variables of SMEs, as well as for the variables related to Environmental Management Accounting (EMA) and financial performance (FP).

Gender Distribution among SME's owners

The table presents the gender distribution among the owners of small and medium-sized enterprises (SMEs).

Table 1. Gender Distribution among SME Owners

Gender	Frequency	Percentage
Male	33	66
Female	17	34
Total	50	100

The data indicates that a majority of Respondents of SMEs are male. Specifically, 66% of the surveyed Respondents of SMEs are men. This suggests a significant gender disparity, with males constituting nearly half of the ownership demographic. Female ownership of SMEs stands at 34%, representing a minority in this population. This percentage is significantly lower than that of their male counterparts, highlighting a gender gap in SME ownership. The total number of Respondents of SMEs surveyed is 50.

Designations of respondents among SMEs

Table 2. Designations of respondents among SMEs

Gender	Frequency	Percentage
Owner	18	36
Manager	14	28
Employee	18	36
Total	50	100

The table on **the Designations of respondents among SMEs** reveals the distribution of roles within the surveyed organizations. Among the 50 respondents, **36%** were owners and an equal **36%** were employees, while managers constituted **28%**. This balanced representation of owners and employees, with slightly fewer managers, ensures a comprehensive understanding of SME dynamics from various hierarchical perspectives, encompassing decision-making authority, supervisory roles, and workforce-level insights.

Registration status among SME's

Table 3. Type of Organization among SMEs

Gender	Frequency	Percentage		
Registered	42	84		
Not Registered	08	16		
Total	50	100.0		

The table on the Type of Organization among SMEs highlights the registration status of the surveyed businesses. Out of the 50 respondents, the majority, 84% (42 organizations), were registered, while only 16% (8 organizations) were not registered. This indicates that most SMEs in the sample operate within a formal, legally recognized framework, whereas a smaller proportion function informally or outside formal registration systems.

Type of Sector of SMEs

Table 4. Type of Sector of SMEs

Gender	Frequency	Percentage
Agriculture	15	30
Manufacturing & Construction	13	26
Service	22	44
Total	50	100

The table on the Type of Sector of SMEs categorizes the surveyed businesses based on their operational sectors. Among the 50 respondents, the service sector accounted for the largest share at 44% (22 organizations), followed by the agriculture sector at 30% (15 organizations), and the manufacturing and construction sector at 26% (13 organizations). This distribution reflects a strong presence of SMEs in the service industry, with a notable representation in agriculture and manufacturing/construction, highlighting the diversity of SME activities across different economic sectors.

Age Category of the respondents of SMS's

Table 5. Age Category of the respondents of the SMS's

Gender	Frequency	Percentage
20-30	10	20
31-40	25	50
41-50	15	30
Total	50	100

The table on the Age Category of the Respondents of SMEs outlines the age distribution among the 50 respondents. The majority, 50% (25 respondents), were aged 31-40, indicating that middle-aged individuals predominantly represent SME roles. This is followed by 30% (15 respondents) in the 41-50 age group, suggesting a significant presence of experienced professionals. The youngest group, aged 20-30, constituted 20% (10 respondents), reflecting a smaller but noteworthy contribution from younger individuals in SMEs. This highlights workforce primarily distribution а composed of experienced and mid-career professionals, with some representation from younger participants.

Descriptive Statistics of the Demographic variables of the respondents of SME's

The descriptive statistics provide a comprehensive overview of the demographic variables of respondents of SMEs, including age, education in years, and business experience in years.

Table 6. Descriptive Statis	ics of the Demograp	hic variables of the	respondents of SME's

No	Descriptive Statistics	Age	Education in years	Business Experiences in Years
1	Mean	37.34	11.50	8.55
2	Standard Deviation	7.051	3.456	6.413

The average age of respondents of SMEs is 37.34 years, with a standard deviation of 7.051 years, indicating a moderate spread around the mean. The average number of years of education among respondents of SMEs is 11.50, with a standard deviation of 3.456 years, showing some variability around the mean educational attainment. The average business experience of respondents of SMEs is 8.55 years, with a standard deviation of 6.413 years, reflecting considerable variation around the mean. Overall, these descriptive statistics provide a detailed snapshot of the demographic characteristics of respondents of SMEs, highlighting the central tendencies, variability, for age, education, and business experience. This information is crucial for understanding the profile of respondents of SMEs and for designing targeted support and resources to meet their needs.

Environmental Management Accounting of SME's

The survey responses to the Likert scale questions on Environmental Management Accounting (EMA) reflect varying degrees of agreement with each statement, with the mean scores suggesting moderate to strong agreement across different practices.

No	Environmental Management Accounting	1 (SD)	2 (D)	3 (N)	4 (A)	5 (SA)	Mean	SD
1	Our company actively integrates environmental costs into our accounting practices.	3(6)	5(10)	13(26)	19(38)	10(20)	3.56	1.110
2	We regularly collect and report environmental data as part of our financial reporting.	0	8(16)	16(32)	18(36)	8(16)	3.52	0.953
3	Our environmental performance is evaluated frequently and systematically.	1(2)	7(14)	7(14)	25(50)	10(20)	3.72	1.011
4	Environmental information is considered crucial in our strategic decision-making process.	4(8)	3(6)	12(24)	21(42)	10(20)	3.60	1.125
5	Our company complies fully with all relevant environmental laws and regulations.	4(8)	9(18)	8(16)	22(44)	7(14)	3.38	1.176
6	We have a dedicated team or department responsible for managing environmental accounting practices.	3(6)	6(12)	14(28)	18(36)	9(18)	3.48	1.111
7	Our company invests in training employees on environmental management and accounting practices.	4(8)	6(12)	9(18)	21(42)	10(20)	3.54	1.182
8	We track and report the financial benefits resulting from environmental initiatives.	8(16)	5(10)	11(22)	17(34)	9(18)	3.28	1.325
9	Our environmental management accounting practices help identify cost- saving opportunities.	0	8(16)	9(16)	23(46)	10(20)	3.70	0.974
10	EMA practices are fully integrated into our overall corporate governance framework.	3(6)	5(10)	11(22)	21(42)	10(20)	3.60	1.107

*The bracket refers to percentage, SD refers to standard deviation

The table on the Environmental Management Accounting (EMA) of SMEs provides insights into how SMEs incorporate environmental considerations

into their accounting and management practices. Key observations include:

- 1. Most respondents agreed (38%) or strongly agreed (20%) that their company integrates environmental costs into accounting, with a mean score of 3.56 and a standard deviation (SD) of 1.110.
- 2. Regular collection and reporting of environmental data showed similar agreement levels (36% agree, 16% strongly agree), yielding a mean of 3.52 and SD of 0.953.
- 3. The frequent evaluation of environmental performance was highly rated, with 50% agreeing and 20% strongly agreeing, achieving the highest mean score of 3.72 and an SD of 1.011.
- 4. The use of environmental information in strategic decision-making had a mean of 3.60 (SD: 1.125), with 42% agreeing on its importance.
- Compliance with environmental laws scored slightly lower (mean: 3.38, SD: 1.176), with 44% agreeing and 14% strongly agreeing.
- 6. Dedicated teams for environmental accounting practices received moderate support (36% agree, 18% strongly agree) with a mean of 3.48 and SD of 1.111.
- 7. Investment in employee training on environmental practices saw 42% agreement and a mean score of 3.54 (SD: 1.182).

- 8. Tracking financial benefits from environmental initiatives scored the lowest mean (3.28, SD: 1.325), though 34% agreed on its occurrence.
- 9. Identifying cost-saving opportunities through EMA practices was positively rated (mean: 3.70, SD: 0.974), with 46% agreeing and 20% strongly agreeing.
- 10. Integration of EMA practices into corporate governance had a mean of 3.60 (SD: 1.107) with 42% agreeing on its presence.

In summary, SMEs show moderate to strong engagement with EMA practices, particularly in evaluating environmental performance and identifying cost-saving opportunities, though tracking financial benefits and full compliance with environmental laws receive slightly lower emphasis.

The impact of Environmental Management Accounting (EMA) practices on the financial performance of SMEs

The survey results on the impact of Environmental Management Accounting (EMA) practices on financial performance reveal varying degrees of agreement among respondents, with mean scores indicating moderate to strong positive impacts.

No	Statements	1	2	3	4	5	Mean	SD
1	EMA practices have significantly reduced our operational costs.	2(4)	6(12)	13(26)	19(38)	10(20)	3.58	1.071
2	Implementing EMA practices has improved our company's profitability.	4(8)	69(12)	13(26)	18(36)	9(18)	3.44	1.165
3	The cost savings from EMA practices outweigh the implementation costs.	4(8)	6(12)	8(16)	22(44)	10(20)	3.56	1.15
4	EMA practices have enhanced our company's financial performance.	4(8)	6(12)	8(16)	22(44)	10(20)	3.56	1.181
5	Our investment in EMA practices has led to a noticeable increase in revenue.	2(4)	12(24)	7(14)	19(38)	10(20)	3.46	1.182
6	EMA practices have provided us with better financial insights for decision-making.	1(2)	8(16)	14(28)	17(34)	10(20)	3.54	1.054
7	Our company's return on investment (ROI) has improved due to EMA practices.	2(4)	6(12)	9(18)	23(46)	10(20)	3.66	1.062
8	EMA practices have led to more efficient resource utilization, positively impacting our finances.	0	12(24)	9(18)	19(38)	10(20)	3.54	1.73
9	The adoption of EMA practices has strengthened our financial sustainability.	4(8)	6(12)	9(18)	21(42)	10(20)	3.54	1.182
10	EMA practices have contributed to a reduction in environmental compliance costs.	4(8)	7(14)	11(22)	18(36)	10(20)	3.46	1.199

Table 8. The impact of Environmental Management Accounting (EMA) practices on the financial performance of SMEs

The table on The Impact of Environmental Management Accounting (EMA) Practices on the Financial Performance of SMEs evaluates how EMA practices influence financial outcomes. Key findings include: 1. Operational Costs Reduction: A mean score of 3.58 (SD: 1.071) indicates agreement that EMA practices help reduce operational costs, with 38% agreeing and 20% strongly agreeing.

- 2. Profitability Improvement: Respondents moderately agreed (36% agree, 18% strongly agree) that EMA enhances profitability, with a mean of 3.44 (SD: 1.165).
- 3. Cost Savings vs. Implementation Costs: EMA's cost savings were seen as outweighing implementation costs, with a mean of 3.56 (SD: 1.15) and 44% agreeing.
- 4. Overall Financial Performance: A mean score of 3.56 (SD: 1.181) reflects moderate agreement that EMA positively impacts financial performance (44% agree, 20% strongly agree).
- 5. Revenue Increase: EMA investments leading to revenue increases had a mean of 3.46 (SD: 1.182), with 38% agreeing.
- 6. Better Financial Insights: EMA practices providing financial decision-making insights had a mean score of 3.54 (SD: 1.054), with 34% agreeing and 20% strongly agreeing.
- Return on Investment (ROI): Improved ROI due to EMA had a strong mean of 3.66 (SD: 1.062), with 46% agreeing.
- 8. Efficient Resource Utilization: EMA's role in enhancing resource efficiency had a mean score of 3.54 (SD: 1.73), with 38% agreeing.

- Financial Sustainability: A mean score of 3.54 (SD: 1.182) indicates moderate agreement that EMA strengthens financial sustainability (42% agree, 20% strongly agree).
- Reduction in Environmental Compliance Costs: Moderate agreement (36% agree, 20% strongly agree) is reflected with a mean of 3.46 (SD: 1.199).

Overall, SMEs report moderate to strong agreement that EMA practices positively influence various financial metrics, particularly in operational cost reduction, ROI improvement, and financial insights, though some areas, such as revenue increases and compliance cost reduction, showed slightly lower levels of agreement.

Karl Pearson correlation coefficient between financial performance, EMA and demographic variables

The table below presents the Karl Pearson correlation coefficients among financial performance (FP), environmental management accounting (EMA), age, years of education, and years of business experience.

Table 9. Karl Pearson correlation coefficient between financial performance, EMA and demographic variables

No	Variables	1	2	3	4	5
1	Financial Performance (FP) total	1	0.895**	0.055	0.046	-0.158
2	Environmental management accounting (EMA) total		1	0.034	.026	-0.181*
3	Age			1	-0.152	0.138
4	Years of Education				1	-0.017
5	Years of Business experience					1

Note: ** denotes significance at 1% level, * denotes significance at 5% level.

The findings indicate a strong and significant positive relationship between financial performance and EMA practices, underscoring the importance of EMA in driving SME financial success. However, demographic variables like age, education, and experience show weak or negligible correlations with both FP and EMA, highlighting their limited direct influence in this context.

Conclusion

The survey on small and medium-sized enterprises (SMEs) reveals a gender disparity, with 66% male ownership and 34% female ownership. The majority of respondents are either owners (36%) or employees (36%), with a smaller proportion as managers (28%). Most SMEs (84%) are registered, and the service sector dominates (44%), followed by agriculture (30%) and manufacturing/construction (26%). Age distribution shows that 50% of respondents are aged 31-40, with an average age of 37.34 years, and respondents have an average of 11.5 years of education and 8.55 years of business experience. These findings highlight the demographic characteristics of SME owners and provide insights for targeted support.

SMEs demonstrate moderate to strong adoption of Environmental Management Accounting

(EMA) practices, with notable strengths in evaluating environmental performance and identifying costsaving opportunities. Strategic integration of environmental information and investment in employee training are also well-received. However, areas like tracking financial benefits and compliance with environmental laws show lower engagement. Overall, EMA practices contribute positively to sustainability and financial management in SMEs, though some aspects need further emphasis. The impact of Environmental Management Accounting (EMA) practices on the financial performance of SMEs is predominantly positive, with significant improvements observed in areas such as operational cost reduction, return on investment (ROI), and financial insights. SMEs show moderate to strong agreement that EMA practices lead to better financial particularly in enhancing resource outcomes, efficiency and sustainability. However, revenue increases and environmental compliance cost reductions received slightly lower levels of agreement. The findings also suggest that while EMA practices strongly contribute to financial success, demographic factors such as age, education, and experience have minimal influence on both financial performance and the implementation of EMA practices in SMEs.

Recommendations

It is recommended that SMEs enhance their focus on tracking financial benefits from EMA practices and ensure better compliance with environmental laws to maximize long-term sustainability. Investing in continuous employee training and strategic use of environmental data could further improve financial performance. Future research should explore the barriers to full EMA adoption, particularly in sectors with lower engagement. Additionally, studies could examine the role of specific demographic factors in shaping EMA implementation and its financial impact. Expanding research to include SMEs from diverse geographical regions could provide a broader understanding of EMA's effectiveness.

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Conflicts of interest

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References

- Ayyagari, M., Beck, T., & Demirguc-Kunt, A. (2007). Small and medium enterprises across the globe. Small Business Economics, 29(4), 415-434. <u>https://doi.org/10.1007/s11187-006-9002-5</u>
- Bebbington, J., & Larrinaga-González, C. (2021). An evaluation of the contribution of environmental management accounting to sustainable development. Sustainability Accounting, Management and Policy Journal, 12(3), 494-515. <u>https://doi.org/10.1108/SAMPJ-10-2020-0479</u>
- Bennett, M. D., Bouma, J. J., & Wolters, T. J. (Eds.). (2002). Environmental management accounting: Informational and institutional developments (Vol. 9). Springer Science & Business Media.
- Bennett, M., & James, P. (2020). Environmental management accounting in SMEs: A systematic literature review and research agenda. *Journal of Cleaner Production*, 266, 121996. https://doi.org/10.1016/j.jclepro.2020.121996
- Burritt, R. L., & Schaltegger, S. (2010). Sustainability accounting and reporting: Fad or trend? Accounting, Auditing & Accountability Journal, 23(7), 829-846. <u>https://doi.org/10.1108/09513571011080144</u>
- Burritt, R. L., Hahn, T., & Schaltegger, S. (2002). Towards a comprehensive framework for environmental management accounting—Links between business actors and environmental management accounting tools. Australian Accounting Review, 12(2), 39-50. <u>https://doi.org/10.1111/j.1835-</u> 2561.2002.tb00202.x
- 7. Central Bank of Sri Lanka. (2017). Implementation of budget proposals 2017 in

respect of banking services. Central Bank of Sri Lanka, 01, 0–2. <u>https://www.cbsl.gov.lk/sites/default/files/cbslwe</u> <u>b_documents/laws/cdg/BSDCircularNo1of2017</u> <u>0.pdf</u>

- Christ, K. L., & Burritt, R. L. (2019). Environmental management accounting: The significance of contingent variables for adoption. Journal of Cleaner Production, 218, 476-486. <u>https://doi.org/10.1016/j.jclepro.2012.10.007</u>
- Huang, Y., Zeng, S. X., & Tam, V. W. Y. (2024). Environmental management accounting in small and medium-sized enterprises: A systematic literature review and research agenda. *Journal of Cleaner Production*, 335, 130176. https://doi.org/10.1016/j.jclepro.2024.130176
- Jamil, C. Z. M., Mohamed, R., Muhammad, F., & Ali, A. (2015). Environmental management accounting practices in small medium manufacturing firms. Procedia - Social and Behavioral Sciences, 172, 619-626. <u>https://doi.org/10.1016/j.sbspro.2015.01.415</u>
- 11. Jasch, C. (2003). The use of environmental management accounting (EMA) for identifying environmental costs. Journal of Cleaner Production, 11(6), 667-676. https://doi.org/10.1016/S0959-6526(02)00107-5
- Li, L., Wu, Y., & Hu, H. (2023). Challenges of environmental management accounting adoption in small and medium-sized enterprises: A systematic review. *Journal of Cleaner Production*, 346, 130347. <u>https://doi.org/10.1016/j.jclepro.2023.130347</u>
- 13. Ministry of Industry and Commerce. (2015). National policy framework for small and medium (SME) development (pp. 1-13). Ministry of Industry and Commerce. <u>http://www.industry.gov.lk/web/images/pdf/fram</u> ew_eng.pdf
- 14. Wijethilake, C. (2017). Proactive sustainability corporate and sustainability strategy performance: The mediating effect of sustainability control systems. Journal of Environmental Management, 196, 569-582. https://www.sciencedirect.com/science/article/ab s/pii/S0301479717302724
- 15. World Bank. (2020). Small and medium enterprises (SMEs) finance. Retrieved from https://www.worldbank.org