

Sustainable Management Practices and Competitiveness Of Micro- Small Medium Enterprises (Msme's) in Esperanza Sultan Kudarat: Basis for Intervention

Jessabel B. Singson¹, Joemarie A. Pono², MS-Econ

¹Sultan Kudarat State University, Department of AB Economics, EJC Montilla, Tacurong City, Sultan Kudarat, Philippines
ORCID ID:0009-0007-3474-1017

²Sultan Kudarat State University, Department of AB Economics, EJC Montilla, Tacurong City, Sultan Kudarat, Philippines
ORCID ID:0000-0003-1202-6972

ABSTRACT: Sustainable management practices pose a challenge for MSMEs due to limited resources, knowledge, and capacity. In this context, this study focused on the influence of sustainable management practices on the competitiveness of Micro, Small, and Medium Enterprises (MSMEs) in Esperanza, Sultan Kudarat. It was designed as a quasi-experimental research study. The respondents comprised 150 managers of MSMEs. Purposive sampling was used to determine the sample size. The researcher adapted instruments from previous research and modified them depending on the needs of the study. Multiple regression analysis was used to determine which domain factors of sustainable management practices significantly influenced the competitiveness of MSMEs. The results revealed that socio-environmental innovation, in terms of innovation, supply chain, and strategy, significantly influences the competitiveness of MSMEs. This underscores the importance of integrating sustainable practices and innovative domains into business operations to enhance market positioning and resilience. Addressing socio-environmental concerns not only drives competitiveness but also fosters long-term viability and positive impact within MSMEs, contributing to sustainable development.

Keywords: *sustainable management practices, strategy, socio-environmental innovation, socio-environmental supply chain, competitiveness.*

I. INTRODUCTION

One of the foundations of strategic management is sustainable development. Companies aim to not only survive but also thrive, outperforming their competitors to earn above-average profits. Aside from the ongoing fierce competition, companies are increasingly prioritizing the future (Karagülle, 2012). Esperanza, Sultan Kudarat, is classified as a first-class municipality in region XII, yet the number of Micro-Small Medium Enterprises (MSMEs) has declined over the years, indicating low economic growth in the area (Cities and Municipalities Competitive Index, 2019-2022). The continuous decrease in the number of MSMEs will significantly impact the local economy, as they provide employment and income opportunities for the people. This decline in MSMEs within the municipality can be attributed to various factors, including poor management practices and ineffective strategic planning, which resulted in businesses failing to remain competitive in the market.

By adopting effective management strategies, robust governance standards, and a steadfast dedication to achieving objectives, an organization can fulfill its mission (Gul, Khan, Raheman & Khan 2017; Ojha, & Acharya, 2018). The poor performance of SMEs may be attributed to diverse attitudes regarding strategic planning. Moradinasab (2021), as well as Kibas, and Mwiti (2017), noted that organizational performance is determined by the extent to which an organization effectively accomplishes its established objectives. They also emphasize the critical role of strategic implementation in attaining an organization's desired goals and objectives.

Companies employing sustainable management techniques tend to be more profitable as they adapt and evolve with

the changing market, giving them a competitive advantage over others. This also contributes to their reputation as socially responsible corporations by reducing their negative impact on society and enhancing their positive influence (Buvaneswari, 2015). Furthermore, Literal (2020) stated that all types of business organizations are increasingly embracing sustainable business practices, recognizing their importance in maintaining sustainable operations. It characterizes the extent to which a company entity manages and collaborates with its suppliers and customers, implementing a set of viable initiatives in its internal operations (Schuftan, 2013; Svensson, 2010).

Sustainable management practices enable business to operate for a long period of time, with the use of effective strategies and innovations that promote competitive advantages among numerous competitors in the market, alongside the goal of green environment to preserve natural resources for future generation. According to (Afonso, Gavilan, García-Madariaga, & Gonçalves, 2018), integrating environmental issues with economic and social goals should be the main focus of green business implementation.

This idea of sustainability in business was conceptualized from the angles of competitiveness and sustainable development (Sarkar, Qian & Peau, 2020). As a result, the concept of sustainable competitiveness is based on the primary strategy in this direction acquiring long-term competitive advantages which produces favorable economic outcomes and helps an organization realize its mission. At the same time, achieving competitive advantages in the contemporary business environment is essentially impossible without understanding the significance of the environmental and social aspects of companies' operations, which have evolved into business's responses to pertinent social demands.

Furthermore, businesses must be flexible enough to adapt to changing circumstances and above all, proactively anticipate requirements for future or even unforeseen development. Businesses must not only proactively extend their strategies and actions outside of their boundaries, but also develop their suppliers and their capabilities, as their supplier base plays a major role in determining the sustainability of the company and the entire supply chain. This is because stakeholders are paying more attention to what occurs at supplier sites

Moreover, sustainable management practices used by the management is said to have an impact on the company or entity's competitiveness as it indicates how strategies are being implemented, socio-environmental innovation transpires, and socio-environmental supply chain is considered. It is generally acknowledged that effective management necessitates the successful completion of corporate operations based on quality management, which is also necessary to achieve sustainable competitiveness. It is believed that quality management can enhance the effectiveness of current organizational procedures and that businesses adjusting to a volatile market environment should also prioritize exploration and innovation (Ko & Kim, 2020).

In an increasingly open and interconnected global economy, both developed and developing nations prioritize competitiveness. The debate over the underlying principles of competitiveness remains a key issue, as despite its recognized relevance, the concept is still poorly understood (Porter, 2003). However, competitiveness is now widely recognized and can be studied at various levels, including the firm level and the national level. Macroeconomic competitiveness must always consider the microeconomic environment. Without being applied in the context of the corporate sector, even the best government policy is ineffective (Horvathova, and Mokrisova, 2020).

The researcher conducted the study to promote sustainability among Micro-Small Medium Enterprises and to determine how sustainable management practices of owners and managers of MSMEs influence their competitiveness. Although there may be empirical findings from other researchers, no study has been conducted by scholars and researchers in our municipality. Therefore, this study will pioneer the promotion and development of the MSME industry in the local area, promoting sustainability through sustainable management practices for better growth and operations.

II. METHODS

The study focused on the influence of sustainable management practices and competitiveness of Micro-Small Medium Enterprises (MSMEs) in Esperanza, Sultan Kudarat. The study was designed as quasi-experimental research. Quasi-experimental research resembles experimental research but is not actually experimental because the term "quasi" indicates a resemblance (Price, Jhangiani, & Chiang, 2015). The respondents of this study were 150 Micro-Small Medium Enterprises (MSMEs) owners and managers, of which 147 are micro-enterprises and 3 are small enterprises. A purposive sampling technique was employed to identify the respondents of this study.

The researcher adopted a questionnaire from the studies of Gati and Vigna (2019) and Sigalas, Economou, and

Georgopoulos (2013). This adopted questionnaire was modified by the researcher and validated by panel experts. The questionnaire was modified to ensure relevance to this study's information needs. Subsequently, the questionnaire was evaluated by panel members and underwent a pilot test. Additionally, Cronbach's alpha was used to test the reliability of the instrument. Objectives 1 and 2 were analyzed using descriptive statistics such as mean and section mean. Objective 3 was analyzed using multiple regression to estimate the influence of sustainable management practices on the competitiveness of MSMEs. Regression analysis is employed to develop predictions for the issue by utilizing the relationship between two or more variables that have cause-and-effect relationships.

III. RESULTS

Table 1. Level of Sustainable Management Practices of MSMEs in Esperanza, Sultan Kudarat in terms of Strategy

Item	Mean	Descriptive level
1. Employing practices to improve health and safety of community	2.84	Sometimes observed
2. Establishment of goals in relation to socio- environmental aspects	2.81	Sometimes observed
3. Formal environmental management system	2.70	Sometimes observed
4. The involvement of all administrative employees to the development of the corporate strategy	2.58	Rarely observed
5. Establishment of metrics (ex. Corporate social responsibilities) in relation to socio- environmental aspects.	2.53	Rarely observed
6. Social action strategy geared towards the internal and external community	2.49	Rarely observed
7. Availability of environmental practice plan or program	2.27	Rarely observed
8. Consistency of the environmental policy disclosed with the nature of the organization’s activities	2.25	Rarely observed
9. The corporate strategy from the socio- environmental perspective, compared to Competitors	2.22	Rarely observed
10. Strategy of publication of indices, reports and certifications related to socio- environmental management	2.16	Rarely observed
Section mean	2.49	Rarely observed

The table shows that the employment of practices to improve the health and safety of the community gathered the highest mean score of 2.84, indicating that the strategy is sometimes observed. Conversely, the strategy of indices, reports, and certificates related to socio-environmental management recorded the lowest mean score of 2.16, describing that this strategy is rarely observed. Overall, the firm rarely employs socio-environmental management techniques, gathering a section mean of 2.49.

Table 2. Level of Sustainable Management Practices of MSMEs in Esperanza, Sultan Kudarat in terms of Socio-Environmental Innovation

Item	Mean	Descriptive level
1. Attaining decrease in frequency of environmental accidents	2.81	Sometimes observed
2. Awareness of employees of health and environmental hazard of technology used	2.64	sometimes observed
3. The use of life cycle analysis for the development of innovation projects	2.45	Rarely observed
4. Switching to environmentally friendly machineries	2.44	Rarely observed
5. The consideration of socio-environmental aspects in innovation projects	2.36	Rarely observed
6. Achievement of corporate goals supporting environmental activities/groups	2.33	Rarely observed
7. The consideration of socio-environmental impacts from the supply chain in innovation projects	2.23	Rarely observed
8. The investigation of potential environmental problems during the development of new projects and actions	2.20	Rarely observed
Section mean	2.43	Rarely observed

As presented in the table, attaining a decrease in the frequency of environmental accidents recorded the highest mean score of 2.81, indicating that socio-environmental innovation practices are sometimes observed. Conversely, the consideration of socio-environmental aspects in innovation projects obtained the lowest mean score of 2.20, indicating that this practice is rarely observed. The overall section mean of 2.43 is interpreted as rarely observed.

Table 3. Level of Sustainable Management Practices of MSMEs in Esperanza, Sultan Kudarat in terms of Socio-Environmental Supply Chain

Item	Mean	Descriptive Level
1. The use of socio-environmental aspects in the management of capital investments	2.55	Rarely observed
2. Management of waste reduction	2.97	Sometimes observed
3. Management of water consumption reduction	2.97	Sometimes observed
4. Management of energy consumption reduction	3.09	Sometimes observed
5. Improving the quality of products	3.26	Sometimes observed
6. Changing of distribution channels to show socio-environmental improvements	2.34	Rarely observed
7. Promotion of proper waste disposal	2.63	Sometimes observed
Section mean	2.83	Sometimes observed

The table presents the socio-environmental supply chain practices of various businesses. Improvement of

product quality obtained the highest mean score of 3.26, described as sometimes observed socio-environmental supply chain practices of the business. Meanwhile, changing distribution channels to demonstrate socio-environmental improvements obtained the lowest mean score of 2.34, indicating that this practice is rarely observed. The overall mean of 2.83 is interpreted as sometimes observed.

Table 4. L evel of Competitiveness of MSME’s in Esperanza Sultan Kudarat

Item	Mean	Descriptive Level
1. Makes use of all market opportunities.	3.00	Sometimes observed
2. Taking advantage of more competitive opportunities than competitors	2.75	Sometimes observed
3. Full neutralization of all competitive threats.	2.67	Sometimes observed
4. Neutralization of more competitive opportunities than competitors.	2.63	Sometimes observed
5.. Reduction of total expenses at higher rate than competitors	2.88	Sometimes observed
6. Reduction of operating expenses at a higher rate than competitors.	2.85	Sometimes observed
7. Reduction of total expenses divided by revenue to a higher level than competitors.	2.74	Sometimes observed
10. Reduction of operating expenses divided by revenue to a higher extent than competitors.	2.76	Sometimes observed
Section mean	2.78	Sometimes observed

Presented in Table 4 are the competitive measures of Micro-Small Medium Enterprises, where making use of market opportunities gathered the highest mean score of 3.00, indicating that this undertaking is sometimes observed. Meanwhile, the lowest mean score of 2.63 is recorded for neutralizing more competitive threats than competitors, also sometimes observed. The section mean of 2.78 is interpreted as sometimes observed.

Table 5. Regression analysis on the influence of Sustainable Management Practices to the Competitiveness of Micro-Small Medium Enterprises (MSMEs) in Esperanza Sultan Kudarat

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. error	Beta	T	Sig.
Constant	.674	.125		5.394	.000
Innovation	.29 9	.086	.308	3.477	.001
Supply chain	.480	.103	.537	4.683	.000
Strategy	.039	.100	.046	.386	.700
Adjusted R-squared	.739				
F-value	137.784				

The relationship between the variables, sustainable management practices, and competitiveness indicates a strong correlation, denoted by the correlation coefficient (r) of .860. A coefficient of determination (r-squared) of .739 indicates that 73.9% of the variability in competitiveness can be explained by sustainable management practices. Furthermore, for a more accurate assessment of the model, an adjusted r-squared is also computed. In this study, an adjusted r-squared of .734 is derived, which means that even with the number of predictors taken into consideration,

73.4% of the variance in competitiveness is explained by the sustainable management practices of micro-small medium enterprises. The .266 in excess means that 26.6% of the competitiveness of micro-small medium enterprises is explained by other variables not indicated in the study. The p-value of 0.000 tested at an alpha level of 0.05 significance revealed that the null hypothesis is rejected.

IV. DISCUSSION

The results reveal varying levels of sustainable management practices among MSMEs in Esperanza, Sultan Kudarat, across three key areas: Strategy, Socio-Environmental Innovation, and Socio-Environmental Supply Chain. In terms of Strategy, the overall mean score of 2.49 indicates that these practices are rarely observed. Although the employment of practices to improve community health and safety is sometimes observed, other strategic elements, such as the involvement of administrative employees and the establishment of metrics for socio-environmental aspects, are less commonly implemented. Notably, the strategy of publishing indices, reports, and certifications related to socio-environmental management is rarely practiced.

For Socio-Environmental Innovation, the overall mean score is 2.43, suggesting these practices are also rarely observed. In this category, reducing the frequency of environmental accidents, indicating some attention to safety. However, there is a notable lack of proactive measures, such as investigating potential environmental problems during new project development. This points to a need for greater integration of socio-environmental considerations in innovation efforts.

In the Socio-Environmental Supply Chain category, practices are somewhat more prevalent, with an overall mean score of 2.83, indicating that they are sometimes observed. Improving product quality suggests a focus on enhancing operational sustainability. However, other practices like changing distribution channels for socio-environmental improvements are rarely observed. These results highlight that while there is some engagement with sustainable practices, particularly in operational aspects, there is a significant opportunity for MSMEs in Esperanza to strengthen their strategic and innovative approaches to sustainability, ensuring more comprehensive and integrated socio-environmental management.

The results from Table 4 highlight the level of competitiveness of MSMEs in Esperanza, Sultan Kudarat, with a section mean of 2.78, indicating that competitive practices are sometimes observed. Making use of all market opportunities suggests that MSMEs occasionally capitalize on available market prospects. Conversely, neutralizing more competitive threats than competitors indicates a relative weakness in effectively countering competitive challenges. Other competitive measures, such as reducing total and operating expenses at a higher rate than competitors, reflecting moderate engagement in cost management strategies.

The regression model highlights the significant contributions of innovation and supply chain practices to competitiveness, with p-values of .001 and .000, respectively, indicating strong statistical significance. However, the strategy dimension, with a p-value of .700, does not significantly contribute to competitiveness. This suggests that while innovation and supply chain practices are critical drivers of competitive advantage, strategic initiatives may need further development to enhance their impact. Overall, the findings emphasize the importance of sustainable management practices in bolstering the competitiveness of MSMEs, while also acknowledging the role of other factors not covered in this study.

V. CONCLUSION

Micro-small medium enterprises (MSMEs) in Esperanza, Sultan Kudarat should align their business strategies with socio-environmental practices to improve reputation, profitability, and competitiveness. The results indicate a lack of integration of sustainability into their strategic plans, suggesting a need for better alignment. Socio-environmental innovation is not a priority for these companies, so they should focus on incorporating sustainability into their innovation processes to enhance resilience and competitiveness. Additionally, socio-environmental supply chain practices are inconsistently applied, requiring more consistent implementation and promotion of similar actions among partners and suppliers. This commitment to sustainability can lead to long-term financial success and positive social and environmental impacts. While MSMEs are capable of countering competitive threats and seizing market opportunities, there is still room for improvement to boost overall competitiveness and ensure long-term success. Finally, socio-environmental innovation

and supply chain practices significantly influence competitiveness, whereas strategy does not, highlighting the areas where MSMEs should focus their efforts.

REFERENCES

- [1] Afonso, C., Gavilan, D., García-Madariaga, J., & Gonçalves, H. M. (2018). Green consumer segmentation: managerial and environmental implications from the perspective of business strategies and practices. *Sustainability in Innovation and Entrepreneurship: Policies and Practices for a World with Finite Resources*, 137-151.
- [2] Buvaneswari, P.S., Shanthi, R.M., Desti, K., & Ragavan, N. (2015). *Sustainable Management Practices: Trends, Issues and Challenges*
- [3] Gati, A. M., Kruglianskas, I., Vigna, C. M., & da Silva, A. M. (2019). The relevance of sustainable management practices to competitiveness in manufacturing companies. *Sustainable Business International Journal*,
- [4] Gul, R., Ullah, S., Rehman, A. U., Hussain, S., & Alam, M. (2020). Corporate governance and cash holdings: Family versus non-family controlled firms. *Cogent Business & Management*, 7(1), 1854562.
- [5] Horvathova, J., & Mokrisova, M. (2020). Business competitiveness, its financial and economic parameters. *Montenegrin Journal of Economics*, 16(1), 139- 153.
- [6] Karagülle, A. Ö. (2012). Green business for sustainable development and competitiveness: an overview of Turkish logistics industry. *Procedia-Social and Behavioral Sciences*, 41, 456-460.
- [7] Kibas, P. G., & Mwitii, J. K. (2017). "Strategic Planning and Performance of Small and Medium Enterprises in the Manufacturing Sector in Nairobi County, Kenya." *International Journal of Economics, Commerce and Management*, 5(10), 401-420.
- [8] Ko, E., & Kim, Y. (2020). Why do firms implement responsible innovation? The case of emerging technologies in South Korea. *Science and Engineering Ethics*, 26(5), 2663-2692.
- [9] Literal, V. J. I. (2020). *Influence of Sustainable Management Practices, Strategic Orientation and Organizational Culture on Sustainability Performance*
- [10] Moradinasab, V. (2021). *Strategies for Successful Implementation of Flexible Workplace Policies in the Middle East (Doctoral dissertation, Walden University)*.
- [11] Ojha, D., Struckell, E., Acharya, C., & Patel, P. C. (2018). Supply chain organizational learning, exploration, exploitation, and firm performance: A creation-dispersion perspective. *International Journal of Production Economics*, 204, 70-82.
- [12] Porter, M. E. (2003). Building the microeconomic foundations of prosperity: Findings from the business competitiveness index. *The global competitiveness report, 2004*, 29-56.
- [13] Price, P. C., Jhangiani, R. S., & Chiang, I. C. A. (2015). Quasi-experimental research. *Research methods in psychology*.
- [14] Sarkar, A., Qian, L., & Peau, A. K. (2020). Overview of green business practices within the Bangladeshi RMG industry: competitiveness and sustainable development perspective. *Environmental Science and Pollution Research*. doi:10.1007/s11356-020-08816-y
- [15] Schuftan, C., & People'Health Movement. (2013). Key Framing Questions to Guide the UN Post-2015 High-Level Panel's Work and Consultations. *Development*, 56(1), 37-45.
- [16] Sigalas, C., Economou, V. P., & Georgopoulos, N. B. (2013). Developing a measure of competitive advantage. *Journal of Strategy and Management*.
- [17] Svensson, L. E. (2010). Inflation targeting. In *Handbook of monetary economics (Vol. 3, pp. 1237-1302)*. Elsevier. Rystematic review. *Sustainable Production and*