



Obstacles for the Sustainability of Micro, Small and Medium-Sized Enterprises

M.A. Rolando Jesús Gamboa Cordova, M.F. Betsy Yamed May Roman*, MINE Ligia Maria Rio Herrera

Universidad Autónoma de Yucatán

***Corresponding Author:** M.F. Betsy Yamed May Roman, Universidad Autónoma de Yucatán

Abstract: *The objective of this study is to identify the obstacles faced by Mexican SMEs in implementing sustainability based on the size of the company. The research has a quantitative, descriptive, non-experimental, and cross-sectional approach. The population comprises Mexican SMEs from various states covering the north, northwest, central, and southeast regions of the country, from which a sample of 4,106 Mexican SMEs was determined. Information was gathered through an online questionnaire directed at the owner or manager of the company. The results of this study indicate that there are obstacles in implementing sustainability in at least two sizes of companies within the population. Conclusion: the main barrier for micro and small enterprises is the perception that implementing sustainable development is too costly for the company, followed by lack of training for company personnel and the complexity of applying environmental regulations. Whereas for medium-sized enterprises, environmental regulations and their complex application are their main barriers.*

Keywords: Sustainability, Corporate Social Responsibility, Sustainable Practices, Obstacles.

1. INTRODUCTION

The development of technology over the last 100 years has resulted in high environmental costs for nature and society. As nature has reached the limit of its capacity to regularly supply renewable resources and absorb the waste generated by society's consumption (CEPAL, 2016). The growing global demand for better environmental management by market actors has highlighted the need for companies, regardless of size, to immerse themselves in environmental care throughout their production processes as a fundamental part of their corporate social responsibility policy. This involves assuming responsibility for the impacts generated and engaging in creating value for stakeholders through the use of good practices (Hernandez, González & Tamez, 2016).

An interesting fact about market actors is that the generation of new companies remains a priority for the development and growth of any economy, particularly for developing countries. The innovation within the context of SMEs is seen as a novel and attractive idea, not only for the recognized impact it has on global economic growth but also for being considered promoters of socio-environmental causes (Sawyer & Evans, 2010). Similarly, micro, small, and medium enterprises (MSMEs) hold significant importance for the sustainable development and growth of any country, especially those in developing stages, as they are the engine of the economy. Ferraz and Ramos (2018) emphasize the importance of these companies as generators of development in Latin American countries. Additionally, Devoto (2016) notes that in emerging economies, MSMEs represent 95% of existing companies, generating between 60 and 70% of employment, contributing around 55% to GDP, and offering most of the job positions.

In contrast, it is MSMEs that face the greatest number of obstacles in managing sustainability. The size of the companies and assets pose limitations due to low production levels, inadequate access to credits and technologies, creating disparities in territories. These effects manifest as delays and inequality, leading governments to implement barriers to protect local industries, whether through product importation, national security, or job generation (Blanchar & Torres, 2015).

2. THEORETICAL FRAMEWORK

2.1. Origin and Evaluation of Sustainability

Sustainability is a fundamental philosophy of our time. It is both a way of understanding the world and a way to solve global problems. The Sustainable Development Goals (SDGs) will guide the next generation of global economic diplomacy. Sustainability can be addressed from a perspective balancing the economic, social, and environmental aspects of society, maintaining the quality of life for future generations. Balancing these aspects has been worked on internationally since 1986, with the emergence of the sustainable development model proposed by the United Nations (UN) (Miranda, López & Vega, 2022).

The global economy is causing a massive environmental crisis that could threaten the lives and well-being of billions of people and the survival of millions of other species on Earth. Environmental threats arise from different sides: humans are altering the planet's climate, freshwater supply, chemistry of oceans, and habitats of other species.

Within this context, companies must constantly seek new opportunities to satisfy their customers, and innovation processes must be flexible for organizations and markets. New ways of production imply innovation, a multi-scenario process where organizations transform ideas into new or improved products, services, or processes to grow, compete, and successfully differentiate themselves in their markets (Baregheh, Rowley & Sambrook, 2009).

Organizations need a widespread vision of corporate sustainability, proposing a change in the business model, aiming not only to do things less wrong but better, internally addressing the company's impacts, as explained by Michael Braungart and William McDonough in their book "Cradle to Cradle" (Sumelzo, Sf. P.14), aiming to improve internally, despite all the implications it generates. Organizations are open systems affected by and affecting the environment.

2.2. Corporate Social Responsibility and Sustainable Practices in MSMEs

The pioneering organization in making socially responsible investments in the 19th century is Quaker (England), aiming to integrate social and environmental principles into investment decision-making. This approach intends to ensure that money usage maintains a focus promoting positive changes in corporate policies and practices, impacting society while not losing sight of business profitability.

As companies face the challenges of a constantly changing environment, there is a growing belief that social responsibility can have an associated economic cost. Being socially responsible doesn't solely mean complying with legal obligations but taking a qualitative leap, investing in human capital, the environment, and relationships with stakeholders. While the ultimate goal is profit generation, it can contribute equally to achieving social and environmental objectives, integrating social responsibilities as a strategic investment in the core of business policy, management tools, and activities (Nuñez, 2003).

Social responsibility aspects involve fundamental labor rights, including freedom of association, the right to collective bargaining, prohibition of forced and compulsory labor, abolition of child labor, maximum working hours per week, weekly rest periods, limits on adolescent work, minimum wages, workplace safety, and minimum health standards, eliminating discrimination and providing equal opportunities. International normative standards of CSR developed so far primarily address social, economic, and environmental issues (Rojas, 2021).

Overall, investment in CSR has been exponentially increasing over the past decade in the business sector, aiming for continuous social and environmental improvement to strengthen stakeholder satisfaction. MSMEs are valued for their contributions to the economy, social aspects, and competitiveness, leading to the sustainable development of these types of organizations (Hernandez & Mendoza, 2016).

Although micro-businesses lack sufficient resources (Vives, Corral & Issusi, 2005) to invest in CSR aspects, they can engage in the topic with small actions within their scope and improve as they grow. These actions can serve as a basis for constructing their business model. CSR is not an exclusive topic for application solely in large companies but also in micro-businesses, as it is viable due to their proximity to the environment and consumers.

Therefore, companies that adopt a strategic perspective and consequently generate social benefits will maintain a balance in seeking financial performance in the company (Candelas, 2017; Savitz & Weber, 2007), turning sustainability practices into part of wealth generation management for shareholders.

2.3. Obstacles in the Implementation of Sustainability Actions

Currently, in most Latin American countries, particularly in Mexico, Micro, Small, and Medium-sized Enterprises (MiPymes) constitute over 99% of total businesses, generating over 70% of national employment and contributing slightly more than 50% to the Gross Domestic Product. Hence, it becomes fundamental for the country to analyze how environmental management is applied in this significant sector, thereby identifying strengths and opportunities that allow favorable changes for the Mexican business sector. In a globalized world, the business sector cannot continue to deny the need to adopt social responsibility as a strategy to achieve both external and internal benefits (Mercado & García, 2007).

Regarding the integration of environmental management into companies, it contributes to enhancing their competitiveness by improving their environmental performance, avoiding environmental impacts, and complying with environmental regulations. However, in the majority of small and medium enterprises, environmental management is not a significant element due to their high level of informality, the limited control exerted by environmental authorities for compliance with environmental regulations, unfamiliarity with environmental regulations and their limited application, economic difficulties, limited access to technology and its high cost, as well as limited access to financing, insufficient dissemination of clean production criteria and pollution prevention, difficulty in hiring qualified personnel, and lack of information on their environmental performance (González, 2017).

In line with the aforementioned, in the report of an exploratory study conducted on forty companies from this sector (MiPymes) by the Center for Technological Innovation at the National Autonomous University of Mexico (CIT-UNAM), among its results, it is highlighted that MiPymes are less familiar with environmental management systems. They are more oriented towards complying with legislation to avoid fines or penalties for non-compliance. Additionally, it points out other limitations arising from the limited or no involvement of official support institutions in the environmental area, such as information centers, consultancies, and universities. Also noted are the lack of technical and administrative capabilities (Olmedo, 2001).

The results of this study show that among the problems faced by MiPymes are: a shortage of economic resources for making innovations in the environmental area, lack of economic and tax support for investment in equipment and environmental technology generation, high interest rates on economic support directed at the environmental area, legislation that favors reactive rather than proactive solutions, involving paperwork and bureaucracy, which is complex, unclear, and rigid; a reactive attitude towards environmental problems, as there is little initiative on environmental aspects; limited access to information and support institutions for technical and administrative aspects due to lack of interest, ignorance, or lack of economic resources; little innovation in environmental matters in companies; short-term planning, considering environmental aspects as an expense; lack of supervision and follow-up by the company to improve its environmental performance and its management system; lack of knowledge of tools aimed at minimizing negative impact on the environment, and, in general terms, limited involvement of top management in environmental decisions to establish policies, plans, and objectives that go beyond compliance with legislation (Olmedo, 2001).

Additionally, various efforts and initiatives are successful in some cases, but the instruments only show effectiveness and continuity in specific situations and contexts. Companies initiate changes in their management due to customer demands, community criticisms, authority requirements, or with the help of external consultants and technical assistance. However, such changes are not sustained once external support or pressure ends (Blackman, 2009).

3. METHOD

The research employs a quantitative approach as its objective revolves around quantifying and measuring a phenomenon by establishing hypotheses that are tested using statistical tools. It is

correlational (relational comparative) as it analyzes a quantitative variable—measuring environmental sustainability perception—relating it to the subject groups defined by another qualitative variable measured in numeric terms: the regions where the MiPymes are located. The research is non-experimental as data is collected without any form of intervention. It adopts a cross-sectional design because the collected and analyzed data correspond to a single point in time. The study gathered data from the year 2021.

Population and Sample

The universe or population consists of all the MiPymes in Mexico; however, in this study, the population was limited to the economic units established in certain federal entities of Mexico, aiming to consider entities from all regions of the country. The sample size considered the total regionalization of the country's entities into eight regions, establishing this size for estimating the proportion of MiPymes presenting the characteristic of interest under study, considering a confidence level of 95% and an estimation error of 6%. Considering the population under study for each region and a non-response rate of 20%, the sample size turned out to be 3,688 MiPymes, effectively resulting in 4,106 companies to which the corresponding survey was applied. This sample is considered representative of the target population.

Instrument and Measurement of Variables

The data used in this study were obtained from the database owned by the research team of the Foundation for Strategic Analysis and Development of Small and Medium Enterprises (network of universities and research institutions in Micro, Small, and Medium Enterprises in Latin America and Spain). This database was built using information obtained through a digital survey of 4,106 Mexican MiPymes conducted from February to May 2022. Information was collected using telephone and electronic surveys (email and messages on the WhatsApp platform), supported by a closed digital questionnaire. The digital survey was administered to the company's manager or administrator. Its design was based on the review of existing scientific literature on the variables studied, as well as previous knowledge of the reality of the companies, justifying that the incorporated variables are relevant to achieve the set objectives.

To measure the variable "obstacles in the implementation of environmental sustainability," managers or administrators of the surveyed companies were asked, on a Likert scale, about their perception of the importance in the application (where 1 indicates an unfavorable evolution and 5 indicates a very favorable evolution) of 6 obstacles in their company during 2021. Based on the responses to the six Likert scale items in the survey, the Environmental Sustainability Index (ESI) is constructed on a scale of 0 to 100 for each observation unit (in this case, the surveyed managers or administrators). The data resulting from the research will be analyzed through a One-Way ANOVA (Analysis of Variance) test, which is a statistical method that allows discovering if the results of a test are significant, determining whether it is necessary to reject the null hypothesis or accept the alternative hypothesis.

Description of Variables

The variables involved in this study are obstacles in the implementation of environmental sustainability and the size of the companies. The 6 obstacles are:

Is implementing sustainable development too costly for the company?

Do we have enough time to address social and environmental issues?

Can the development of sustainability actions lead to a loss of competitiveness?

Is there difficulty in financing sustainability-related projects?

Is there a lack of environmental training for company personnel?

Is environmental regulation complex to apply?

The size variable is relevant in identifying the obstacles faced by MiPymes in their attempt to be sustainable. To determine the company's size, respondents were asked for this data with the following values:

Microenterprise

Small business

Medium-sized enterprise

4. RESULTS

The global results of the obstacle variable for each of the questions delimiting environmental sustainability in the surveyed companies are presented below:

28.3% of respondents neither agree nor disagree that implementing sustainable development is too costly for the company. In contrast, 48.5% of surveyed MiPymes agree (22.5%) and completely agree (26%) that implementing sustainable development is too costly for the company. According to Trang (2015), they generally lack sufficient and specialized resources, despite a high degree of adaptability and operating in highly competitive markets.

32% of the surveyed MiPymes neither agree nor disagree that they lack sufficient time to address social and environmental issues, closely followed by 32.8% of MiPymes who completely agree with this idea.

Regarding the obstacle that sustainability actions may lead to a loss of competitiveness, 32.3% neither agree nor disagree, contrasted with 31.8% who completely agree with this premise.

30.9% of surveyed MiPymes neither agree nor disagree that there is difficulty in financing sustainability-related projects. This is followed by 43.7% who completely agree.

MiPymes that neither agree nor disagree that there is a lack of environmental training for their company's personnel represent 28.10%, contrasted with 46.6% who completely agree with the premise.

To conclude the review of obstacles faced by MiPymes in implementing sustainability, it is noted that 29.9% of surveyed companies neither agree nor disagree that environmental regulations are complex to apply, contrasted with 44.7% who completely agree.

Through a summary of cases classified by size (another variable in the research), it can be determined that the main barrier in micro and small enterprises is the perception that implementing sustainable development is too costly for the company, followed by the lack of training for company personnel and the complexity of applying environmental regulations. In contrast, for medium-sized enterprises, environmental regulations and their complex application are the main barrier.

Regarding the results of determining the Obstacle Index for the implementation of Environmental Sustainability in micro, small, and medium enterprises, the indicators are 56.844, 58.177, and 62.169, respectively. This means that, with larger company sizes, the perception of the importance of barriers to sustainability is higher.

As a result of the ANOVA analysis, according to the p-value (0.000), the null hypothesis is rejected, concluding that there are obstacles in the implementation of sustainability in at least two of the company sizes in the population, confirming the proposed research hypothesis. The homogeneity of variance test reveals significant differences in at least two sizes of companies in the population.

5. CONCLUSIONS

It is concluded that concerning the size of micro, small and medium-sized enterprises, the larger the company, the greater the perceived importance of barriers to sustainability. Although, in general terms, the results obtained do not align with most of the evidence found regarding the size of MiPymes, certain conclusions can be drawn from the few significant differences found.

The primary barrier in micro and small enterprises is the perception that implementing sustainable development is too costly for the company, followed by the lack of training for company personnel and the complexity of applying environmental regulations. In the case of medium-sized enterprises, environmental regulations and their complex application constitute the primary barrier.

In the same vein, there are obstacles that complement those found in previous works (Borga et al., 2009; Nielsen and Thomsen, 2009; Herrera et al., 2013). Concerns about projecting a good image and avoiding tarnishing the reputation with potential sanctions take precedence over the benefits that CSR (Corporate Social Responsibility) can generate through cost reduction or increased revenue. However, for this purpose, as some authors have already suggested (Halila, 2007; Spence and Perrini, 2009), the support services for the strategic integration of CSR available to MiPymes should be strengthened.

Micro, small and medium-sized enterprises perceive that, in the implementation of CSR, it is more important to integrate social and environmental values into the strategy than to achieve an improvement in profitability. Additionally, the perception of a lack of knowledge about sustainability issues generates significant concern because current and future employees are increasingly identified and involved in sustainable management within the company to enhance competitiveness. This concern for strategic integration somewhat confirms the assertions of Bingham et al. (2010) regarding the relevance of long-term vision and concern for a generational shift supported by ideals for Micro, small and medium-sized enterprises.

As a final result of the research, it can be assured that there are obstacles faced by Mexican Micro, small and medium-sized enterprises in the application of environmental sustainability based on the size of the company.

REFERENCES

- Baregheh, A., Rowley, J., & Sambrook, S. (2009) Towards a multidisciplinary definition of innovation. *Management decision*, 47 (8), 1323-1339.
- Blackman, A. (2009), "Alternative Pollution Control Policies in Developing Countries. Informal, Informational and Voluntary", *Discussion paper series* (EFD DP 09-14), junio.
- Blanchar, E.E.B. & Torres E.C. (2015) La innovación tecnológica como factor generador de competitividad en las organizaciones, y el papel del Estado-País. *Revista Universitaria Ruta*. 17 (1) 15-a.
- Braungart, M., & McDonough, W. (2018). Cradle to cradle. *Vintage Classics*.
- Bingham, J. B., Dyer Jr., W. G., Smith, I. y Adams, G. L. (2010). A stakeholder identity orientation approach to corporate social performance in family firms. *Journal of Business Ethics*, 99(4), 565-585.
- Borga, F., Citterio, A., Noci, G. y Pizzurno, E. (2009). Sustainability report in small enterprises: case studies in Italian furniture companies. *Business Strategy and the Environment*. 19, 162–176.
- Candelas, R. (2017). Hacia un Modelo Económico para el Desarrollo Sustentable. *Centro de Estudios Sociales y de opinión Pública (CESOP) Documento de trabajo 259*, México.
- CEPAL. Horizontes 2030: la igualdad en el centro del desarrollo sostenible (LC/G.2660/Rev.1). Santiago. 2016.
- Correa, E. y Estevéz, R. (2011). Gestión de la RSE: cambio y diseño organizacional. La responsabilidad social de la empresa en América Latina. Fondo Multilateral de Inversiones. *Banco Interamericano de Desarrollo*. Nueva York.
- Correa, E. (2004). Responsabilidad social corporativa en América Latina: una visión empresarial. *División de Desarrollo Sostenible y Asentamientos Humanos, Naciones Unidas*, Santiago de Chile.
- Devoto, L. (2016). La sustentabilidad en las pymes, ¿es posible? *Cuadernos del Centro de Estudios de Diseño y Comunicación*, 57, 105-123.
- Ferraz, J., & Ramos, L. (2018). Inclusión financiera para la inserción productiva de las empresas de menor tamaño en América Latina: innovaciones, factores determinantes y prácticas de las instituciones financieras de desarrollo. *Cepal*
- González Ordoñez, A.I. (2017) La gestión ambiental en la competitividad de las Pymes. *Revista Científica Agrosistemas*, 5 (1) 60-70
- Halila, F. (2007). Networks as a means of supporting the adoption of organizational innovations in SMEs: the case of environmental management systems (EMSS) based on ISO 14001. *Corporate Social Responsibility and Environmental Management*, 14, 167–181.
- Hernandez, A., González, H., & Tamez, G. (2016) *Desarrollo Sustentable de la Teoría a la Práctica* UANL Monterrey, México.
- Hernandez E.A., & Mendoza J.M. (2016) Responsabilidad Social Empresarial para Mipymes: Un escenario de cumplimiento metodológico para el desarrollo sustentable. *Revista de Economía y Administración* 13 (1) 71-80
- Mercado, P. y García, P. (2007). La responsabilidad social en empresas del valle de Toluca (México). Un estudio exploratorio, *Estudios Gerenciales*, 23(102), 119-135.
- Miranda, M., Lopez E., & Vega C. (2022) Hacia una perspectiva integral de gestión en sostenibilidad empresarial. *Trascender, Contabilidad y Gestión.*, 7 (19) 150-164
- Núñez Reyes, G. (2003) *La responsabilidad social corporativa en un marco de desarrollo sostenible*. Santiago de Chile.
- Olmedo, Bernardo & Solleiro, José Luis. (2001) *Políticas Industriales y tecnológicas para las pequeñas y medianas empresas*. Miguel Ángel Porrúa. Universidad Autónoma de México. México DF.

- Rojas, M.F. (2021) *Análisis Investigación Empresas Mipymes e Implementación RSE*. Universidad Santo Tomás, Bucaramba.
- Sawyer, J., & Evans, N. (2010) An Investigation in to the Social EviromentalResponsability Behavior of Regional Small Business in relation to the impact on the local community and immediatedEnviromental. *Australian Journal of Regional Studys*, 16(2), 253-265
- Vives, A., Corral, A. & Issusi, I. (2005) *Responsabilidad social de la empresa en las PYME de Latinoamérica. Departamento de Desarrollo Sostenible, División de Micro, Pequeña y Mediana Empresa, Banco Interamericano de Desarrollo*, Washington DC.
- Vives, A. (2011). Responsabilidad de la empresa ante la sociedad. La responsabilidad social de la empresa en América Latina. Fondo Multilateral de Inversiones. *Banco Interamericano de Desarrollo*. Nueva York.

AUTHORS' BIOGRAPHY



Rolando Jesús Gamboa Cordova, currently works at Petróleos Mexicanos, a state-owned public enterprise, MBA, Universidad Autónoma de Yucatán (UADY). B.S. in Public Accounting, Universidad Autónoma de Yucatán (UADY).



Betsy Yamed May Román, Coordinator of the Master's in Finance at Yucatan Autonomous University. Full time professor in the Facultad de Contaduría y Administración (FCA, UADY). Master's in Finance, Universidad Autónoma de Yucatán (UADY). B.S. in Public Accounting, Universidad Autónoma de Yucatán (UADY).



Ligia María Río Herrera, Full time professor in the Facultad de Contaduría y Administración (FCA, UADY). M. Ed in Innovation, Universidad Autónoma de Yucatán (UADY). B.S. in Public Accounting, Universidad Autónoma de Yucatán (UADY).

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