

Assessing the SMEs' Readiness of Facing Barriers in Institutional and Legislation Setting and Drivers for Sustainability in Sri Lanka: A Literature Review and Directions of Future Research

P.S.K. Rajapakshe^{1*}, *S.A.U. Niranjala*², *M.A.K.N. Aravinda*¹, *J.M.G. Lalani*², *K.S. Denipitiya*²

¹Department of Environmental Management,

²Department of Economics, Faculty of Social Sciences and Humanities,

Rajarata University of Sri Lanka

* Correspondence: pskr75@yahoo.com

Abstract

Developed and developing countries have recognised Small and Medium Enterprises (SMEs) as the key to innovations, economic growth, and market competition. In Sri Lanka, SMEs play a leading role in environmental, social, and economic sustainability. The paper attempts to assess institutional and legislation barriers and drivers affecting the sustainability of SMEs in Sri Lanka by using a systematic literature review. The researchers filled the literature gap on institutional and regulatory barriers and drivers on SMEs sustainability growth and found a structured research framework. The research findings will provide clear directions for further investigations on drivers for sustainable transition and barriers to the development of SMEs in an empirical context which unquestionably help find the case-specific and unique obstacles and drivers for the sustainability of SMEs.

Keywords: *Economic Growth, Economic Sustainability, SMEs, Sri Lanka*

1. Introduction

Small and Medium Enterprises (SMEs) empower domestic demand through innovation, job creation, and competition; consequently, they can be a driving force that backs a resilient national economy (Shinozaki, 2012). The development of SMEs is recognised as a key to ameliorating innovations, enhance economic growth, and increase market competition in both developed and developing economies (Paula, Steinhauser, & Soares, 2020).

A strong SME sector could provide enhanced employment opportunities and contribute to economic growth and the development of a competitive market system in Sri Lanka (Velnamby, 2017). Similarly, Karatayev et al. (2016) stated that SMEs play a notable role in economic growth and development by generations of employments or creating new employment, revenue generation, contributing to the GDP growth, embarking on innovations and enhancing other economic activities, regional development, technological advancement, entrepreneurs, and social development. Hence SMEs has become a major advantage to Sri Lanka in many ways, i.e., economic, environmental, and social sustainability. SMEs are also an important source with innovative potential and job-generating possibilities.

Srivastava (2007) stated that, as the Sustainable Transition Development (STD) has gained significant attraction under today's competitive business environment, many organisations still depend on natural resources and contribute to environmental pollution. The organisations suffer from adopting sustainable practices since most of them are not aware of how to utilise the enablers and alleviate development barriers (Srivastava, 2007).

Sri Lankan governments, firms, academics, and policymakers have a good understanding and are becoming more aware of sustainable development over the past decades. The firms that use sustainable solutions tend to experience more severe obstacles than the other firms; therefore, government institutions often support them. The governmental bodies have been developing and implementing investment programmes for research and development to find sustainable solutions, but the knowledge about which policies are suitable and effective is inadequate. Policymakers of the country tend to favour a particular type of firms (Velnamby, 2017). According to Weerasiri et al. (2016), environmental, technological innovation may lead to win-win situations in which improvements in environmental quality and economic growth coexist.

The possibility of providing sustainable renewable energy, technological, and green growth solutions already demonstrated through initial commercial successes makes the parties towards SMEs. The SMEs having between 10 and 250 staff, and typically older than three years can sell (new) products to the existing consumer base in local markets. Despite the attention shift, the governmental policymakers are reluctant to support SMEs as these firms are often more vulnerable to failure because they have a small market coverage and are sensitive to environmental changes, both natural and manmade, such as Covid-19, floods, and Easter attack. Also, the market failures put severe pressures on their low levels of limp resources. Despite many efforts to push the sustainability adaptation in Sri Lanka, this adaptation has remained relatively slow, partly because of the lack of governmental support, various policy changes, and other barriers for sustainable transition in the country.

2. SMEs is in local context

The definition of SMEs in Sri Lanka differs from every agency and institution. According to Kodippiliarachchi, Priyanath, and Premarathna (2017), the SMEs of Sri Lanka pave their path of socio-economic development by making a valuable contribution to the country's employment, GDP, trade balance and other relevant facets.

National Policy Framework (2017) for SME development is a notable landmark in the expedition to build a more conducive environment for SMEs. It envisions adapting SMEs to large scale and sustainable business entities. Recently, businesses tend to follow the triple bottom line concept, which emphasises the need of imposing a balance between people [social wellbeing, planet (environmental sustainability) and profit (financial sustainability)] to succeed in a challenging, competitive, and dynamic business environment.

A win-win situation could be gained by the environmental technologies in which improvements in environmental quality and sustainability growth coexist (Gamage, 2003). Table 1 illustrates how the government of Sri Lanka has elucidated SMEs.

Table 1: Definition of SMEs

Sectors	Criteria	Medium	Small	Micro
Manufacturing Sector	Annual turnover	Rs. Mn. 251-750	Rs. Mn. 16-250	Lower Rs. Mn. 15
	Number of Employees	51- 300	11- 50	less than 10
Service Sector	Annual turnover	Rs. Mn. 251-750	Rs. Mn. 16-250	Lower Rs. Mn. 15
	Number of Employees	51- 200	11 -50	less than 10

Source: National Policy Framework for Small Medium Enterprise Development (2015)

The objectives of this study are three-fold: to analyse global literature of drivers and barriers for sustainable adaptation development, to identify the nature of the relationship and its profuse types and pinpoint the research gaps in terms of drivers and barriers in the sustainable development of SMEs.

The current research meticulously captures some dominant gaps in the existing literature and discloses institutional barriers and regulations barriers for SMEs' STD. It also describes the structured model to be utilised to review both institutional and regulatory drivers and barriers for the sustainable transition of SMEs in the final section.

3. Methodology

The literature review first focuses on the global and Sri Lankan Small and Medium Enterprises' sustainable adaptation development, and then on different components of the research questions. The terms of institutional and legislation barriers drivers in Sri Lanka were also reflected throughout the review.

The following research questions were evolved to perceive the objective: What are the types of institutional and legislation drivers? What are the types of institutional and legislation barriers? What are the less focused drivers and barriers in contemporary literature? What kind of driver actions are taken to enhance sustainability development?

First, the researcher performed an extensive web search and selected 260 journal publications and research articles for this review because data are obtained exclusively from a literature review survey. The literature disclosed eight types of drivers and ten types of barriers, and the researcher suggested a unique ideological framework to achieve the objectives of the literature-based study. Hence, it is necessary to amalgamate SMEs sustainability transition development. The overall

concept identified from this paper illustrates several drivers and barriers throughout the Sri Lankan SMEs sustainable adaptation development.

4. Results and Discussion

4.1 Institutional and legislation barriers recognised for sustainability of SMEs in Sri Lanka

The availability of literature in the area of institutional and legal barriers to sustainable transition development of SMEs make that area relatively rich. According to Lev et al. (1993), the leather industry in Sri Lanka has recognised three significant constraints, i.e., access to financial resources, non-financial resources, and the high cost. The research findings show that the primary impediments were the lack of finance and resources for the sustainable development of SMEs. Furthermore, the high rates of taxes were a major impediment for the small firms. The research focused on distinct sectors to devote more specific and detailed information about the barriers that SMEs face in the selected firms. However, the lack of updated data and the expense of conducting the required surveys limited the chance of using the results more broadly.

Pissarides (1999) determined whether the insufficiency of funds for green productions is the main barrier to SMEs' development. Research data gathered from the European Bank for Reconstruction and Development pointed out that insufficiency of financing became a barrier to SMEs sustainable adaptation due to market competitiveness, poorly developed capital, and where credit was granted according to historical working practice. Blackburn (2009) stratified the growth ways into incremental, rapid, and episodic and then investigated the collision of access to finance, market conditions, and management on expanding the business firms. The results show the expansion of SMEs was influenced by the insufficiency of modern machines, lack of qualified employees, lack of marketing strategy, and no advanced management skills. Van (1993) mentioned that SMEs with no proper communication system needs support from their relatives, friends, consumers, government, international agencies, and fund providers such as banks to enhance the sector by increasing entrepreneurs and SMEs.

The identified barriers have been classified as institutional barriers and legislative barriers using the existing literature (Table 2).

Table 2: Elements of Institutional and Legislation barriers for SMEs to sustainable adaptation development in Sri Lanka

S/No	Institutional Barriers	S/No	Legislative Barriers
BI 1	Lack of Organisational Resources	BL 1	Weak Legislation
BI 2	Lack of Financial Resources	BL 2	Lack of Environmental Enforcement
BI 3	Lack of Proper System of Getting Market Information	BL 3	Support from Regulatory Government Agencies
BI 4	Lack of Energy Transition	BL 4	Lack of Guidelines Implementation
BI 5	No Opportunity Entrepreneurs	BL 5	Lack of Knowledge About Policy Framework
BI 6	Lack of Risk Awareness & Management	BL 6	Negative Perceptions and Attitudes of Environmental Laws
BI 7	Cost of Waste and Hazardous Products Disposal and Improper Waste Management	BL 7	Lack of Local Authority Compliance Controls
BI 8	Low Public Pressure	BL 8	Absence of Environmental Impacts Assessments
BI 9	Lack of Market Availability & Competition	BL 9	Lack of Qualified Policy Makers
BL 10	Lack of Government Support for National Innovation Strategy	BL 10	Lack of Environmental Licence

Source: Author's literature survey findings (2021)

4.2 Institutional Barriers

BI 1. Lack of organisational resources: This research emphasizes many SMEs in Sri Lanka suffer a lack of organisational resources, such as lack of modernisation of machinery for product development, absence of labourers and innovators, absence of skilful managers, use of inferior products materials (Gamage, 2003).

BI 2. Lack of financial resources: The most prominent issues the small-scale business owners face in Sri Lanka are the high cost of finance and the insufficiency of institutional support in financing (Karunanayake, 1999).

BI 3. No proper system of getting market information: The unavailability of an appropriate system of obtaining market information to SMEs is a common problem in Sri Lanka. According to Gamage (2003), there is no adequately coordinated network that furnishes marketing information and assistance to SMEs in Sri Lanka.

BI 4. Lack of Energy transition: This study elaborates that the government can help enhance the contribution of SMEs to the energy transition, primarily via policy

measures such as performance audits and network access. Sri Lanka inevitably needs any intricate research and development.

BI 5. No opportunity entrepreneurs: Sri Lankan entrepreneurs are found as Fabian or Drone entrepreneurs, which means they do not innovate anything. It shows that Sri Lankan entrepreneurs lack innovation skills, and they do not innovate. This fact shows the lack of innovative culture among Sri Lankan entrepreneurs.

BI 6. Risk awareness and risk management: According to Henchel (2008), small and medium-sized business firms face more challenges than large firms when it comes to risk management. According to Jayathilaka (2012), they do not have the necessary resources concerning human resources, databases, and specificity of knowledge to carry out a structured and standard risk management.

BI 7. Cost of waste and hazardous products disposal and improper waste management: The problem of improper waste management has become a global issue and a hurdle to the sustainable growth of SMEs. Basically, waste management is divided into two, preventive actions and corrective actions. Waste management, recycling, reduction of hazardous waste, and treatments can be identified as corrective actions. All business firms could apply these actions after some pollution happened in the business environment. Preventive actions are waste reduction, reuse of waste disposal, and the end-of-life cycle management process. The company production processes influence these activities.

BI 8. Low public pressure: Malwenna (2019) found that the low public pressure in Sri Lanka poses the biggest issue on SMEs in the country. There needs to be some pressure from the key social roles like local communities, NGOs, banks, media, insurance companies, or politicians. All over the public pressure and government policy makers want to introduce stick regulations for SMEs. High public pressures supporting process for firms' stakeholders also facilitate in obtaining advantages (Malwenna, 2019).

BI 9. Lack of Market facilitation and skill development: The development of market mechanism is less toward market facilitation and skill development because they have no strategic market strategies that have the resources and expertise to inspire the SME Sector's standing in Sri Lanka. Small-scale farmers, micro-entrepreneurs, and self-employers find it difficult to find a market.

BI 10. Lack of government support for national innovation strategy and innovation policy: The sustainable development of SMEs has attenuated by the lack of support of the government rules in Sri Lanka. The governments have mainly focused on providing funds for SMEs but neglected to develop the innovative system by promoting the research and development sector of SMEs in Sri Lanka. This, in turn, requires more enhanced capability, resources, and capacity of scientific manpower and better labs and equipment.

4.3 Legislation Barriers

BL 1. Weak legislation: There is no proper legislative definition for SMEs at present, and different institutions have given different definitions. These lead to various problems in implementing the government policy for the growth of SMEs. The Sri Lankan government has not identified the urgent requirement of developing legislative supports. Also, there is no clear enforcement such as providing incentives, assistance, and tax concessions to SMEs on a consistent, continuous basis, and no clear packaging services.

BL 2. Low environmental enforcement: An efficient functioning programme is absent in the Sri Lankan SMEs directives and policy standards to save natural resources by focusing on reducing waste, recycling materials and reusing resources to banish excessive product and packaging waste.

BL 3, 4. Lack of support from regulatory government agencies and lack of guidelines:

Even though Sri Lanka gives high priority to enhancing the SME sector, it does not involve a good integral part of an overall industrialisation policy. It has not recognised the strengths, threats, weakness, and opportunities (Thrikawala, 2011). The SMEs of Sri Lanka are relatively knowledgeable and have visions, views, and attitudes regarding environmental pollution problems. Still, in the country, SMEs have no good network or linkages among the industries and other stakeholders.

BL 5. Lack of knowledge about policy framework: SME policy framework must pay exceptional attention to develop nature's capital, craft sector, women entrepreneurship, green growth, strengthening handicraft villages, enterprise villages, industrial production villages, and SME industrial estates/zones. The government support must prioritise the committed, capable, and interested entrepreneurs with a sensibly good track record.

BL 6. Negative perceptions and/or attitudes of environmental law: According to Ghazilla et al. (2015), there is a general lack of regulatory contact, either because SMEs do not want to initiate contact and/or because direct face-to-face regulator contact/enforcement action reduces the environmental legislation not being effectively implemented or having much influence on SMEs. This leads to those SMEs towards negative attitudes and/or perceptions of environmental laws. It pinpoints that more effective enforcement is essential for developing SMEs' attitudes and perception of the environment.

BL 7. Lack of recent policy changes related to SMEs: The prevailing policy framework is not favourable and not well focused on expanding opportunities for enhancing rural employment in the country. The government policies of Sri Lanka do not facilitate SMEs to access reliable and sufficient information, which lead to prepare more rational decisions, safeguarding transactions from opportunism, and identifying suitable governance mechanisms. There is a neglecting nature of SMEs policy change on supporting formal governance; instead, they have encouraged

relational governance to some extent only for selected SME, which obstruct the development of SMEs across the country.

Table 3 summarises the identified institutional and legislative drivers for the sustainable adaptation development of SMEs based on the existing literature.

Table 3: Types of Institutional and legislation drivers for SMEs to sustainable adaptation development in Sri Lanka

Institutional Drivers		Legislative Drivers	
DI 1	Green Technology, Innovation & Energy Efficiency	DL 1	High Law Enforcement of SMEs Related Laws
DI 2	Improvement of Infrastructures	DL 2	Corporate Governance Practices and Policies
DI 3	Awareness and Communication of Local Customers in Green Manufacturing Practices	DL 3	Voluntary GMP Regulations and Standard (e.g., ISO 14000 & Eco Labelling)
DI 4	Governmental Incentives Support	DI 4	Compulsory GMP Regulation Mandated by Local Government
DI 5	Strategic Organizational Networks	DI 5	Updating Current Policies and Emission Reduction
DI 6	Reduction Market Failures and Improve Market Opportunities Improvements	DL 6	Environmental Impacts Assessments Score
DI 7	Top Level Management & Brand Management	DL 7	Employee Attitudes Towards Compliance with Environmental Laws/Policies
DI 8	Entrepreneurship Development	DI 8	Implementation Of Environmental Protection License Scheme

Source: Author’s literature survey findings (2020)

4.4 Institutional Drivers

DI 1. Technology improvements: The following four areas, i.e., manufacturing facilities, operational processes, production technologies, and management-oriented factors, can be appertained to environmental technologies to a green manufacturing system. Some studies evolved a general point in using green or environmental technological innovation to measure sustainable growth, thus implicitly supposing technology to be a driver of green growth (e.g., Kijek & Kasztelan, 2013; Samad & Manzoor, 2015; Sueyoshi & Goto, 2014). The assumption may be used, and unforeseen on different contexts, but the studies provide theoretical and explanatory empirical evidence that investments in a technological swap and innovation in

specific fields are major drivers of green growth (e.g., Böhringer et al., 2012; De Medeiros et al., 2014; Musolesi & Mazzanti, 2014; Woo et al., 2014).

DI 2. Improvement of infrastructures: From 2017 to 2020, the government carried out a national programme launched in 2017 to work on exporters. A series of activities were performed under this programme; some as facilitation for setting up infrastructure facilities lands/industrial estate, facilitation for bank financing, facilitation for technology transfer/sourcing of machinery/training and market development, as identified, followed up, and monitored. The researcher suggested that an approach based on a private and public partnership may be needed to prop up a responsive and sustainable institutional support structure. Internal and external factors affecting adoption of more environmentally-responsible actions. Responsible of SME sector have good advocacy, policy and related sector promotion activities.

DI 3. Awareness and communication of local customers in green products: The researcher stated that reverse logistics activities include rectifying failed items, recycling and reusing materials, and packing materials. Muma et al. (2014) claimed that reverse logistics refers to the role of logistics in source reduction, recycling, product returns, waste disposal, material substitution, reuse of materials, repair, and remanufacturing. The firms that perform their jobs with eco packaging and design plan to manufacture products and packaging by minimal consumption of materials and energy. Besides, firms are encouraged to ease the reuse, recycle, and recover component materials and parts (Diab et al., 2015).

DI 4. Improvements of government support:

SMEs need assistance from institutions to overcome some growth barriers. The provision of information, advice, and training services are some ideal assists that the local institutions and agencies can supply. Various discriminatory legal regulations and inappropriate tax systems are a burden for SMEs, and complicated laws, rules, and regulations related to SMEs could be tough on small and growing entities. It provides an incentive for entrepreneurs to find ways to evade regulations leading to the growth of the grey economy (Horan, 2011). “A road map to digital highway” is a motto Sri Lanka follows as they wish to ride high on the electronic highway and stimulate e-commerce. This is conducted by the government’s e-Sri Lanka vision, championed by the SME sector in developing Countries (Gamage, 2003).

The present government of Sri Lanka gives some priority to enhance the country’s SME sector. Governmental, non-governmental, NGOs, financial, national, and international institutions came to power of SMEs from time to time to attain the SMEs (Priyanath & Premaratne, 2014). The “Saubhagya COVID-19 Renaissance Relief” scheme through Licensed Banks at 4% annual interest rate for 20,240 SMEs affected by COVID-19 has approved 55 billion rupees. It is targeted at reviving the affairs of the economic development introduced by the Central Bank of Sri Lanka under the guidance of the Sri Lankan government. Thus, the government can give priority to the SME by improving the overall performance of the sector.

DI 5. Strategic organisational networks: The research findings disclosed that SMEs maintain two types of network relationships. The first one is social network relationships, and it contains family, friends, relatives, and acquaintances. The second one is organisational networks. It resides in supporting networks such as banks, government bodies, Non-Governmental Organisations (NGOs), other SME supporting institutes, and inter-firm network relationships such as relationships with large-scale organisations or SMEs. Due to a lack of financial resources in setting up and running information systems, most SMEs do not perform efficiently (Priyanath & Premaratne, 2014). SMEs need information systems for cost-effective and faster means of communication and to run the business efficiently. The emerging evidence shows that the usage of information systems may help to find raw materials for their products, find buyer markets for their finished products, and staying well-informed about environmental conditions, such as market trends, availability of financial resources of efficient technology/machinery, and government policies and initiatives. According to Malwenna (2019), it can reasonably be assumed that there is a vast opportunity for growth in this sector and that it is imperative to saddle the full benefits of the sector to the domestic economy with the help of networking and forming peer groups for better haggling from large enterprises.

DI 6. Reduction of market failures and improve market opportunities: Hemachandra and Kodithuwakku (2006) stated that market orientation among resource-limited rural farmers in Sri Lanka was relatively poor. SMEs faced some market failures, and linking resource-limited farmers to markets generates new opportunities for them. According to IFAD (2012), some farmers and farmer groups in the upcountry in Sri Lanka, who are cultivating vegetables, have accepted the SMEs' initiatives for establishing such links (to convert farming into a competitive and fast-moving sector in Sri Lanka). They have realised that one such initiative is the public-private partnership to bring public institutions, private companies such as popular supermarket chains, and farmers together to guide the farmers to modernise the farming culture of the country (IFAD, 2012).

DI 7. Top-level management & brand management: Professional and skills of brand management are other drivers. Also, it is a good attempt for SMEs' sustainable growth. Boatwright et al. (2009) emphasised that business managers and marketing officers have realised that brands are only valuable when they possess value to their customers. Therefore, building a brand to satisfy customer value is a primary goal to accomplish and gain market share.

Nevertheless, drivers for SMEs are how to create a brand identity that entirely meets the needs of existing and new customers but also can be consistent with product attributes simultaneously. For the sustainable growth of SMEs in Sri Lanka to succeed in current legal and policy statements, the enforcement and updating of good management practices are the critical success factors. Thus, SMEs in Sri Lanka should focus on top-level management and sustainable green human resources management. It must deal with almost all the stakeholders, functions, manager/owner, employees, and customers for decision-making. If the SMEs desire significant benefits, they can include these functions.

DI 8. Entrepreneurship development: Empirical evidence reveal that SMEs are essential for creating employment opportunities for others, self-employment, and increasing GDP growth, contributing to export earnings, poverty alleviation of the country, and providing livelihoods to stakeholders. It must address skilful manpower as per the sector's demands, enhancing productivity and product quality by adopting new technologies, increasing investment capacity, and providing product-specific manufacturing skills to the youth by generating and maintaining an activating environment through harmonisation of government policies. As a developing country, Sri Lanka has contributed to entrepreneurship as a major concept of sustainable economic development. Nevertheless, the country has not made a genuine benefit of entrepreneurship on economic development. It is a severe issue in the economy of Sri Lanka, and as a result, it has impacted more unemployment issues with very low economic growth (Prasanna & Ekanayake, 2019).

4.5 Legislation Drivers

DL 1. High law enforcement of SMEs-related laws: SMEs in Sri Lanka may have some institutional and regulation drivers and barriers for a sustainable transition. Its results lead to a list of institutional and regulatory drivers and barriers for SMEs. Four institutional and five regulation drivers and barriers appear to be highly disadvantageous to SME's sustainable transition effort: technological complexity of energy solutions, insufficient financial resources, high market competition, and low legitimacy of renewable energy solutions. The ambition of this driver goal is to help new enforcement and updated current SMEs standards, rules, policies, and regulations. It assists in enhancing market competitiveness, becoming sustainable in transition development, improving the more effective use of the green manufacturing system, making environmental standards and a suitable waste management system. It can only be attained if all the relevant roles in the public, private, and civil society sectors make sustained endeavours to fill the gap in low awareness of, access to, and use of the green policy system by inventors, entrepreneurs, researchers, and SMEs. There are very limited number of researches to study high law enforcements drivers on the sustainable development of SMEs in Sri Lanka. Overarching institutions governing the fertility behaviour of adults, who generally accept an enhancement of their economic situation to come along with a lower quality of the natural environment for their children at a latter part in time, planned by Constant et al. (2014). So that this driver is tested in its validity, policy is measure for sustainable development.

DL 2. Corporate government practices and policies: Corporate governance practices and policies are a set of processes, policymakers, customs, laws, stakeholders, and institutions affecting how a corporation is controlled, administered, or directed. Oversighting of the company following the principles of responsibility, transparency, and long-term management comprises corporate governance.

Corporate governance mechanisms are known as the mechanisms that protect the shareholders' interests. Good corporate governance helps in sustainability. In developing a market economy and promoting economic growth, good governance is

always important in emerging and transitioning economies (Judge et al., 2003; McCarthy and Puffer, 2003). Some SMEs managers may also manage their companies as if it were only their stakes that were involved and satisfying their own interest to the impairments of other main stakeholders and the company as a whole. SMEs may, however, be less likely to have resources to accomplish corporate governance developments (Ghazilla et al., 2015). Therefore, it is momentous to make the public aware of promoting the understanding of principles of good governance in SMEs.

DL 3. Voluntary GMP regulations and standards (e.g., ISO 14000 and Eco Labelling):

According to Hosseini (2007), the worldwide certification of ISO 14000 had enlarged more than ten times from 1997 to 2002. Sri Lankan governments implemented ISO 14000 standards and addressed many aspects of environmental management for SME sectors. ISO 14001:2004 and ISO 14004:2004 standards deal with environmental management systems (EMS), ISO 14001:2004 gives the requirements for an EMS, and ISO 14004:2004 provides general EMS guidelines for services sectors. Voluntary Green Manufacturing regulations, standards, and guidelines in the family address particular environmental aspects, including monitoring, eco-labelling, performance evaluation, LCA, communication, and auditing. It evaluates the environmental impact assessments of firms and their products. It is designed to set targets, document policy and procedures, develop them, prioritise environmental response plans, execute ongoing measurements against targets, and provide guidelines for internal auditors.

DL 4. Compulsory regulations mandated by local government: In cases of market failures, market-based principles, incomplete tax, and strict orders of government can play a strategic role in enhancing the SME sector. Government regulations can measure the problems of SMEs. In promoting SMEs, they should focus carefully and aim to make work efficient and provide incentives for the private sector to assume an active role in SME. Moreover, it improves the perception among entrepreneurs of the range of financing options available from private investors, official programmes, and banks. Government regulation is necessary, and national policies should encourage manifold forms of institutional savings. Institutional investors should be regulated, and flexibility for the environment enables the sustainable development of the firms.

DL 5. Updating current policies and emission reduction: According to Pushpakumari and Watanabe (1992), if the current laws and policies are updated from a well-affected discrepancy among business activities and personal viewpoints, as a result where environmental policies are undertaken, they tend to be primarily reactive in nature, one-off, and focus on emission depletion (“end-of-pipe treatments”) rather than on pro-active pollution depletion measures. Many SMEs in Sri Lanka tried to use and concentrate on eco-based solutions and substantial changes in material, production processes or operations management, and materials recycling process. This is the role of legislation in driving and intimation of sustainable growth. Legislations draw certain recommendations and policy adjustments of different levels

of governance on SMEs. Global environmental policy in the last decades has resulted in a structural break in the global carbon dioxide emissions in economic development relation so that firms and their stakeholders must be aware of organising board meetings. The current awareness and environmental practices are adopting environmental policies, standards, directives, and ISO 140001, EMS. Moreover, despite such enormous emphasis on current laws and in accordance with the fact that proactive policy, in general, is a crucial driver of green growth, the distinct effects of specific policies may not always be easy to extricate.

DL 6. Environmental impacts score: Assessing the environmental impact can be identified as one of the analytical tools for scrutinising the possible environmental consequences of implementing projects, activities, programmes, and policies (Ngniatedema Li & Illia, 2014). When it comes to accustom the fact that some companies operate in more than one industry, Truscott uses a benchmarking system for each of those sectors from publicly revealed environmental data (e.g., the EPA Toxics Release Inventory). Truscott also scrutinised the quality of any data from outside before using it (Ngniatedema, Li & Illia, 2014).

DL 7. Employee attitudes towards compliance with environmental laws/policies: In Sri Lankan economic industries, green policies play a vital role. That kind of policy is critical for every firm's statement about the commitment to sustainability and environmental management that business plans to make (Ngniatedema, Li & Illia, 2014). Mainly, the directives show employees and customers that maintaining environmental issues is a company's high priority. Green produces, green use, green process, and green end-of-life management are compromised in green policies (Bhattacharya, Jain, & Choudhary, 2011).

DL 8. Implementation of environmental protection license scheme: In Sri Lanka, the Environmental Protection License (EPL) is considered a regulation/legal tool under the amenities of the "National Environmental Act No: 47 of 1980" amended by Act Number 56 of 1988 and Act Number 53 of 2000. On 25.01.2008, industries and activities, which needed an EPL have mentioned in Gazette Notification Number 1533/16 dated. Those industries are categorised under three lists: List "A", "B", and "C" depending on their pollution probability- Part A: 80 significantly high polluting activities, Part B: 33 numbers of medium level polluting activities, and Part C: 25 low polluting industrial activities. The Local Authorities in Sri Lanka carry out complications of EPLs and related functions such as follow-up, rules and monitoring, and directives implementation.

4.6 Less focus barriers and drivers in the literature

As a developing country, Sri Lanka is facing numerous hurdles to achieve sustainable development. According to the available literature, the country primarily confronts institutional barriers and legislation barriers. The role of the Sri Lankan government is vital as they are integrating SMEs into the international supply chain. They have created small business administration responsible for assisting SMEs; business associations can be encouraged to accept some of this responsibility.

According to Malwenna (2019), the government has a weak incentive supporting process for SMEs stakeholders and facilitates accessing financing. Also, the SMEs in Sri Lanka are suffering from some tax such as importation of pharmaceutical machinery and spare and equipment for bakery products, manufacture of footwear, bags, unprocessed agriculture, and fishing, plastic products, machinery to produce rubber, moulding (glass, steel, rubber, and plastic), and items needed in the poultry industry. The available literature indicates that the weightage on drivers and barriers in Sri Lanka is less than in the other countries. One of the main reasons for that is, although the government has taken some actions to overcome these barriers, the execution part does not happen as previously planned.

4.7 Driver actions to promote sustainability development

It is momentous for SME firms to be sustainability tory challenges. However, the importance of economic, environmental, and social dimensions differs from time to time and in relation to transition development in choosing appropriate and correct drivers to work out the SMEs financial, institutional, and regulation to different criteria. According to the past literature, the study has identified several drivers to overcome the institutional and legislative barriers to sustainable development. The identified facts have been elaborated using a framework as in Figure 1.

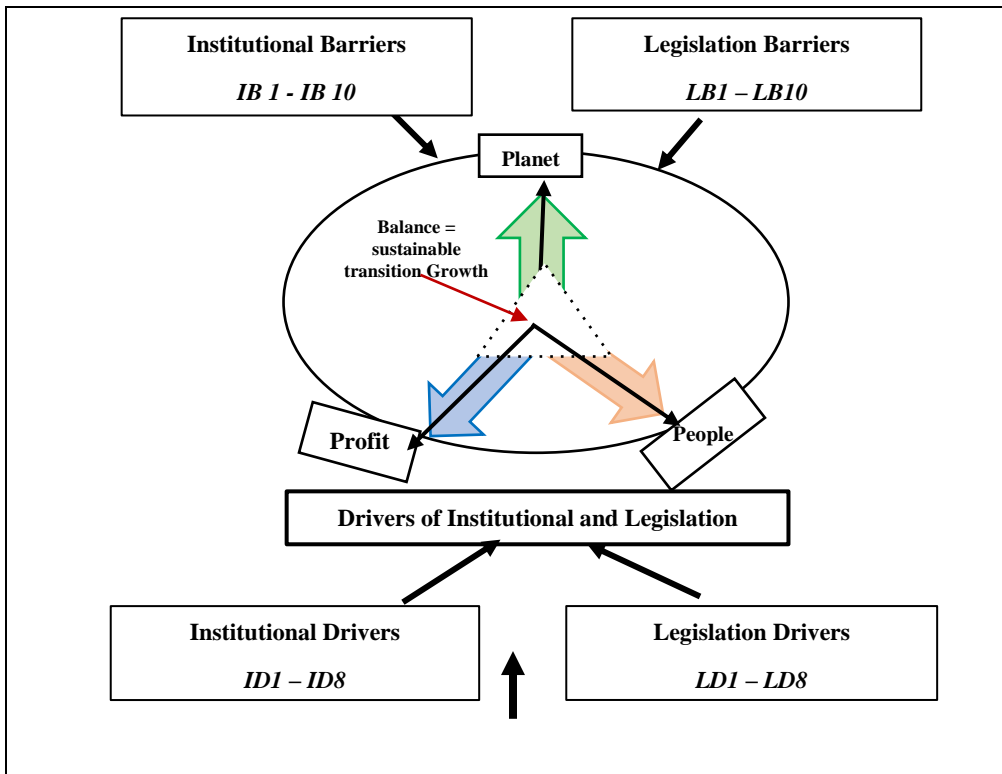


Figure 1: Towards a framework for SMEs' sustainable adaptation development

5. Conclusion

The SME sector is an effective tool for poverty alleviation and inclusive economic growth in Sri Lanka. Government regulations and promotions are dominant factors for the effective implementation of policies and regulations. The SME sector feels burdened with current rules and regulations, and they are not helpful to enhance SME performance. The researcher faced some difficulties finding empirical evidence in the Sri Lankan context to justify this adverse situation because of a deficiency of research and development. Therefore, the availability of literature is limited. According to the global and Sri Lankan evidence, researchers recognised institutional and legislative barriers result in a noteworthy negative relationship on SMEs sustainability, but institutional and regulations drivers result in a significant and positive relationship on SMEs. Researchers also find out structured research frameworks and tried filling gaps of literature on institutional and regulatory drivers and barriers to SMEs sustainability growth. Moreover, the study suggested the above framework for SME firms becoming progressively essential and appropriate in enhancing sustainability development in Sri Lanka. The findings of this literature-based study laid the foundation for further investigations for researchers of drivers and barriers for sustainable adaptation development of SMEs in an empirical context, which undoubtedly helped to find out the case-specific and specific drivers and barriers for sustainable growth of SMEs.

References

- Bhattacharya, A., Jain, R., & Choudhary, A. (2011). Green Manufacturing Energy, Products and Processes.
- Blackburn, R., & Brush, C. (2009). *Understanding the challenges to growth in entrepreneurial firms: cases from the UK and USA* [Paper presentation]. XXIII RENT conference, Budapest, Hungary. <https://livrepository.liverpool.ac.uk/id/eprint/3105941>
- Boatwright, P., Cagan, J., Kapur, D., & Saltiel, A. (2009). A step-by-step process to build valued brands. *Journal of Product & Brand Management*, 18(1), 38-49.
- Böhringer, C., Balistreri, E. J., & Rutherford, T. F. (2012). The role of border carbon adjustment in unilateral climate policy: Overview of an Energy Modeling Forum study (EMF 29). *Energy Economics*, 34, S97-S110.
- De Medeiros, J. F., Ribeiro, J. L. D., & Cortimiglia, M. N. (2014). Success factors for environmentally sustainable product innovation: a systematic literature review. *Journal of Cleaner Production*, 65, 76-86.
- Diab, S. M., Al-Bourini, F. A., & Abu-Rumman, A. H. (2015). The impact of green supply chain management practices on organizational performance: A study of Jordanian food industries. *J. Mgmt. & Sustainability*, 5, 149.
- Gamage, A. S. (2003). Small and medium enterprise development in Sri Lanka: a review. *Masuki Ronso*, 3(4), 133-150.

- Ghazilla, R. A., Sakundarini, N., Rashid, S. H., Ayub, N. S., Olugu, E. U., & Musa, S. N. (2015). Drivers and barriers analysis for green manufacturing practices in Malaysian SMEs: A Preliminary Findings. *12th Global Conference on Sustainable Manufacturing*, (pp. 658 – 663). Malaysian.
- Hemachandra, D., & Kodithuwakku, S. S. (2006). Business orientation among poor dry zone farmers in Sri Lanka. *Sri Lankan Journal of Agricultural Economics*, 8(1381-2016-115725), 31-49.
- Henschel, T. (2008). *Risk Management Practices of SMEs Evaluating and Implementing Effective Risk Management System*. Erich Schmidt Verlag Berlin.
- Horan, G. O. (2011). Exploring management perspectives of branding in service SMEs. *Journal of Services Marketing*, 25(2), 114-121.
- Hosseini, A. (2007). Identification of green management system's factors: A conceptualized model. *International Journal of Management Science and Engineering Management*, 2(3), 221-228.
- International Fund for Agricultural Development FAD (2012), "Making a difference in Asia and the Pacific – Sri Lanka: supporting public-private partnerships", Newsletter, Issue 2, Rome, available at: www.ruralpovertyportal.org/documents/654016/632631/DLFE-3826.pdf/88dd5c8d-5910-42e7-9144-d4003914941f?version=41.0
- Jayathilaka, B. (2012). Risk Management Practices in Small and Medium Enterprises: Evidence from Sri Lanka. *International Journal of Multidisciplinary Research*, Vol. 2 Issue 7, Issn 2231 5780.
- Judge, W. Q., Naoumova, I., & Koutzevol, N. (2003). Corporate governance and firm performance in Russia: An empirical study. *Journal of world business*, 38(4), 385-396.
- Karatayev, M., Hall, S., Kalyuzhnova, Y., & Clark, M. L. (2016). Renewable energy technology uptake in Kazakhstan: Policy drivers and barriers in a transitional economy. *Renewable and Sustainable Energy Reviews*, 120-166.
- Karunanayake, R. (1999). Effective strategic issues for the development of small and medium enterprises (SMEs) in Sri Lanka: special reference with fish processing industry in Sri Lanka (Doctoral dissertation, 大阪市立大学).
- Kijek, T., & Kasztelan, A. (2013). Eco-innovation as a factor of sustainable development. *Problemy Ekorozwoju - Problems of Sustainable Development*, 8(2), 103-112.
- Kodippiliarachchi, P., Priyanath, H., & Premarathna, S. (2017). Role of SMEs in Industrial Development in Sri Lanka. In *CURRENT STATUS OF INDUSTRY: ISSUES AND CHALLENGES*. Sri Lanka: Sri Lanka Economic Association – Annual Sessions.

- Lev, L. S., Grath, D. M., Murray, H., & William, R. D. (1993). Organizing and Conducting Farmer- Scientist focus sessions. *Journal of Natural Resources and Life Science Education*.
- Malwenna, K. (2019). Application of Information Systems in Small and Medium Enterprises in Sri Lanka. *International Conference on Business Research*. Sri Lanka: University of Moratuwa.
- Mazzanti, M., & Musolesi, A. (2014). Nonlinearity, heterogeneity and unobserved effects in the carbon dioxide emissions-economic development relation for advanced countries. *Studies in Nonlinear Dynamics & Econometrics*, 18, 521-541.
- McCarthy, D. J., & Puffer, S. M. (2003). Corporate governance in Russia: A framework for analysis. *Journal of World Business*, 38(4), 397-415.
- Ministry of Industry and Commerce. (2017). National policy framework for small & medium enterprises 2017. Retrieved from http://www.sed.gov.lk/sedweb/en/wp-content/uploads/2017/03/SME-framework_eng.pdf
- Muma, B. O., Nyaoga, R. B., Matwere, R. B., & Nyambega, E. (2014). Green supply chain management and environmental performance among tea processing firms in Kericho County-Kenya. *International Journal of Economics, Finance and Management Sciences*, 2(5), 270-276.
- Ngniatedema, T., Li, S., & Illia, A. (2014). Understanding the impact of green operations on organizational financial performance: an industry perspective. *Environmental Quality Management*, 24(1), 45-59.
- Paula, F. D., Steinhauer, V. P., & Soares, T. (2020). Internationalization of SMEs: a systematic review of 20 years of research. *Journal of International Entrepreneurship*.
- Pissarides, F. (1999). Is lack of funds the main obstacle to growth? EBRD's experience with small- and medium-sized businesses in Central and Eastern Europe. *Journal of Business Venturing*, Vol 14(5), 519-539.
- Priyanath, H., & Premaratne, S. (2014). Government SME Development Programs in Sri Lanka: A Review in the Lens of Transaction Cost Economics. *Sabaragamuwa University Journal*, Volume 13 Number 2; pp 59-81.
- Pushpakumari, M., & Watanabe, T. (1992). Do strategies improve SMEs' performance? An empirical analysis of Japan and Sri Lanka. *Meijo Asian Research Journal*, Volume 1 Number 161-75.
- Rehman, M. A. A., & Shrivastava, R. L. (2013). Development and validation of performance measures for green manufacturing (GM) practices in medium and small scale industries in Vidharbha region, India. *International Journal of Society Systems Science*, 5(1), 62-81.

- Samad, G., & Manzoor, R. (2015). Green growth: important determinants. *The Singapore Economic Review*, 60(02), 1550014.
- Shinozaki, S. (2012). *A new regime of SME finance in emerging Asia: Empowering growth-oriented SMEs to build resilient national economies* (No. 104). ADB Working Paper Series on Regional Economic Integration.
- Sivstava, S. K. (2007). Green Supply Chain Management: A State of Art Literature Review. *International Journal of Management Review*, 22(3), 256-277.
- Sueyoshi, T., & Goto, M. (2014). Photovoltaic power stations in Germany and the United States: A comparative study by data envelopment analysis. *Energy Economics*, 42, 271-288.
- Thrikawala, S. (2011). Impact of Strategic Networks for the Success of SMEs in Sri Lanka. *World Journal of Social Sciences*, Vol. 1. No. 2. Pp. 108 - 119.
- Van, D. (1993). Small Enterprises and the Process of Globalization and Regional Integration. *Small Enterprise Development. An International Journal*, 4(3), 4-13.
- Velnamby, P. T. (2017). An Analysis of Dividend Policy and Market Value of Listed Manufacturing Companies in Sri Lanka. *International Journal of Scientific & Engineering Research*, Volume 8, Issue 6, 214.
- Weerasiri, S., Zhengang, Z., & Perera, T. R. (2012). Innovation and creativity of small and medium scale enterprises (SMEs) in Sri Lanka: A Review. In *International forum of researches students and academics*, 2(1), p. 7.
- Woo, J. Y., Kim, K. K., Lee, J., Kim, J. T., & Han, C. S. (2014). Highly conductive and stretchable Ag nanowire/carbon nanotube hybrid conductors. *Nanotechnology*, 25(28), 285203.