Editorial

Towards a research agenda for building business resilience to climate change in the SME sector of Sri Lanka

Small and medium enterprises (SMEs) are considered the mainstay of economic growth in Sri Lanka with contributions of 45% to local employment, 20% to exports, and 52% to the GDP. However, when the SMEs in the informal sectors are considered their contributions to the economy are far beyond the aforementioned contributions. Climate change is increasingly having an adverse impact on business activities in terms of interruptions to supply chains, loss of revenue, damage to assets, cost of insurance and declining financial performance. Climate change-related risks were perceived by business experts and scientists as the major long-term threat to the world with severe impacts over the next decade (Wynes et al., 2022).

According to Global Climate Risk Index which measures fatalities and economic losses caused by extreme weather, the country is ranked among the high climate risk vulnerable countries, for instance in 2017, Sri Lanka was among the three most affected countries.

To overcome climate change impacts especially from climate extremes some SMEs respond through coping strategies without recognising the root cause of vulnerability, while the majority do nothing and face the consequences. As climate extremes are increasingly having an adverse impact on businesses' coping or incremental adaptation strategies to climate change is not going to be enough, in such circumstances, transformative adaptation is the most appropriate response. Transformation which is seen as a change towards a future that is fundamentally different from the existing is considered to be the best approach to deal with these environmental uncertainties (Fedele et al., 2019; Roggema et al., 2012). Hence, transformational adaptation offers an alternative approach to address the root causes of vulnerability through a combination of fundamental shifts in social-ecological systems in terms of technology innovations, institutional reforms, cultural changes, and behavioural shifts by questioning values, deeply held assumptions, power structures, beliefs, and stereotypes (Fedele et al., 2019; O'Brien 2012; Pelling 2011). Transformational adaptation is capable of not only addressing climate-related uncertainties, but also other issues faced by societies such as poverty, limited access to markets, finance, expertise, and technology.

However, limited awareness of the potential, lack of business and financial capacity along with insufficient support systems and associated constraints to transformational adaptation largely hamper the adaptation efforts of SMEs (Leitold 2021; Kuruppu et al., 2013; Howe 2011).

SMEs potentially face greater short-term losses after exposure to natural disasters as they have less ability than larger firms to deal with climate change due to a lack of resources, liquidity, and skilled personnel; weak managerial skills; and lack of technical capacity (UNISDR 2013; Hampel-Milagrosa et al., 2015; Fernández-Olmos and Ramírez-Alesón, 2017; Crick et al., 2018). They also lack planning and access to capital for recovery and face serious infrastructure problems impeding recovery (Runyan 2006).

Research in Sri Lanka reveals that agrifood supply chain actors comprising assemblers, processors, distributors, wholesalers, and retailers who are mainly SMEs are severely affected by climate extremes especially those dealing in perishable products such as fruits, vegetables, and fish (Esham and Wijeratne, 2021). A study on SMEs in Sri Lanka finds that due to deficiencies in the enabling environment, SMEs are unable to adopt suitable adaptation measures for managing climate risks (Dale et al., 2022).

On the positive side, some research has shown that SMEs that have successfully implemented effective adaptation measures contribute towards the whole country's economic resilience while some research findings in developing countries show that climate change has a significant positive impact on SMEs' innovation (Alam et al., 2022). Notwithstanding the significant role of SMEs in economic development, employment creation and their environmental significance, there is a lack of research on climate change and SMEs to understand the dynamics of the SME sector at a time when the frequency and intensity of climate extremes are increasing.

These assertions raise some pertinent research questions for future exploration: How do SMEs respond to climate change and extremes? What underlying factors make them vulnerable to climate change impacts? Why some SMEs are more vulnerable while some are resilient to climate change impacts? Are SMEs in the informal sector more vulnerable than SMEs in the formal economy? How does climate change impacts stimulate creativity and innovation among SMEs? What changes need to be affected to change the status quo and bring about transformational change to enhance the coping capacity and business resilience of SMEs? How can governments create an enabling environment to stimulate and incentivize SMEs to adopt climate-smart practices? Finding answers to these research questions will fill the existing research gap in climate change discourse in the SME sector and help to develop a holistic approach to create an enabling environment for building a climate-resilient SME sector.

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