

## Abstract

This study is to explore the knowledge of green supply chain management based on the rubber industry in Sri Lankan context. The objective of this study is "To examine the green supply chain management practices (GSCMP) and "To identify the barriers for implementation of GSCM practices of Rubber Processing Industry of Sri Lanka. Quantitative online survey and qualitative case studies and semi-structured interviews, a mixed methodology research strategy is applied in this report. The mix methodology uses an approach combining online survey to explore GSCMP and opinions of selected expert ideas from five different sectors of rubber industry in Sri Lanka. Achieving the first objective, seventy-five GSCMP were identified after reviewing literature and divided in to eight subcategories. Data were collected from fifty-three respondents from five case companies of Sri Lankan rubber industry through online structured questionnaire survey. Data were analyzed using descriptive analysis. Eco-Design/Green Design, Internal Environmental Management, Investment Recovery were not considered for analysis to facilitate removing of double loading and below 0.5 factor loadings. Green Purchasing, Cooperation with Customers have a less contribution towards GSCMP and Green Manufacturing, Regulatory Norms/Legislation, Reverse Logistics were the main areas contributed to GSCMP in Sri Lankan rubber industry. Achieving the second objective, forty-six barriers for GSCMP were identified after reviewing literature and case study method with industry expert using semi structured interview. Barriers were divided into six dimensions. Thematic Analysis method was used to analyse information of interviews had with experts. All six subcategories are identified as barriers in Sri Lankan rubber industry and no significant deviations have been identified. However, this study can provide concerns parties in organizations, relevant institutions policy makers and finally government with a better understanding of the GSCMP and its barriers to implementing and motivate the researchers to further extend the investigation.

**Keywords:** Green Supply Chain Management Practices, Rubber Processing Industry, Sri Lanka