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Guest editorial

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Green supply chain management for sustainable competitiveness

Sustainable competitiveness has become a major concern for all organizations in the present context of globalized markets. Financial performance is no longer only criteria to assess the performance of an organization. Performance frameworks are continuously changing. In the past, organizations used to focus mainly on cost, quality and delivery time. These have now become qualifying criteria to survive in competition. In the present scenario, the situation is changing very fast. Social and environmental issues are becoming more important now. Therefore, performance frameworks are being integrated with these emerging issues of sustainability. It incorporates the economic, social and environmental factors. To achieve the objectives of sustainability, organizations need to restructure their whole production systems in terms of product and process design, not only for forward flow but also for reverse flow from consumers. This is the reason that now green supply chain management (GSCM) has become an emerging area of research for academicians and professionals. Therefore, this special issue has been brought out to highlight the importance of green supply chains for industrial organizations.

In this special issue, six high-quality research papers appear dealing with GSCM for sustainable competitiveness. The first paper authored by Sundarakani *et al.* deals with the impact of implementing GSCM practices on corporate performance. It has developed a research model to test the relationship between four main GSCM practices, namely, eco design, green purchasing, environmental cooperation and reverse logistics, and four dimensions of corporate performance: operational performance, environmental performance, economic performance and social performance, while controlling three main variables (firm size, firm age and environment management system certification). While none of the four GSCM practices were found to have any impact on the environmental performance, green purchasing and environmental cooperation were found to have a significant impact on the operational performance. The study also found that only green purchasing plays a role in improving the economic performance, while only reverse logistics practices were found to impact the social performance of the firm positively.

The second paper authored by Singh *et al.* analyzes the factors for implementation of GSCM. Based on literature review, 12 factors have been identified and these are further modeled by interpretive structural modeling approach. It has been observed that top management commitment, integration among supply chain members, vendors' development, environment friendly packaging & transportation, reverse logistics management and development of a green performance measurement system are the major drivers for a successful implementation of GSCM. The third paper authored by Amol Singh studies the sustainable GSCM trends and current practices. The review reveals that there exists a need to address behavioral issues like human resource management and supply chain partner relationship management. Moreover, closed-loop supply chain management and waste management are the areas that need special focus to achieve environmental sustainability.

The fourth paper authored by Agarwal *et al.* focuses on triple bottom line performance evaluation of reverse logistics. The performance measures, based on the

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triple bottom line approach were selected and the fuzzy analytic hierarchy process and extent analysis approach were applied for estimating the weights, global weights of performance measures and finally the reverse logistics performance index. The reverse logistics performance of three electronic firms was evaluated and compared for the demonstration of this methodology. It is observed that economic performance has the highest importance, followed by environmental performance and social performance. The fifth paper authored by Banavara *et al.* considers the lean management as a step towards sustainable green supply chain. This research is exploratory in nature and studies lean management implementation environment with a focus on developing a framework for a Green Supply Chain (GSC) established through a path of identifying waste minimization techniques, which automatically contribute to green initiatives in supply chain design invariably qualifying an ordinary supply chain as a Green Supply Chain. The approach is based on identifying the framework parameters for both carbon footprint analysis and lean management. The focus of study is cross-sectional, within and outside aviation industry based on the information collected through survey methodology. The sixth paper is by Sharma and Gandhi to explore correlations in components of Green Supply Chain Practices and Green Supply Chain Performance. The constructs "Green Supply Chain Practices" and"Green Supply Chain Performance" are identified in a co-relational study.

The editors of this special issue are of the view that findings emerging from this special issue will be of a great value for researchers and practitioners to upgrade their existing work and content of the knowledge. Finally, the editors of this special issue express their sincere thanks to all researchers and anonymous reviewers, who have contributed to this special issue and to the Chief Editor and his team for giving full support to bring this special issue on emerging research area for academic researchers and industry professionals.

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