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## Development of a Framework for a Gate-to-Gate Ecolabel for the Sri Lankan Apparel Industry

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### Abstract

In the international trade, the textile and clothing production processes should comply with the local and international standards. In the Sri Lankan scenario, around 44% of textile and clothing products are exported mainly to Europe and US. Ecolabel is a tool that promoting a product or a service with minimum environmental impacts based on its life cycle consideration. Currently there are no ecolabels developed particularly for the Sri Lankan apparel industry and we are relying on ecolabels developed internationally. There are four approaches of ecolabels based on their scopes. They are cradle to grave, cradle to gate, gate to gate, and gate to grave ecolabels. Major aim of this study is to develop a framework related to a gate to gate ecolabel considering the raw material processing to fabric manufacturing stages in Sri Lanka. At the beginning, scope of the ecolabel was identified considering gate-to-gate process stages considering the raw material (yarn) processing to fabric manufacturing. Based on an extensive review on the global Eco labels and stakeholder consultation in the apparel industry, potential criteria and suitable indicators for each of these criteria have been identified. Based on the preliminary studies, key criteria for an apparel ecolabel related to Sri Lanka is identified as, sustainable chemical management practices, usage of sustainable materials, energy conservation and management, water and wastewater management, solid waste management, Green House Gas (GHG)/ carbon emission management. Weights for each of these criteria and indicators were derived through consulting sustainability experts in leading apparel export companies in Sri Lanka through a questionnaire survey. Then a suitable rating scheme has been developed based on these weights for the ecolabel and a potential framework has been developed for the gate-to-gate ecolabel. The framework was then tested by applying it to two different fabrics and a rating was given them based on their sustainability. Final outcome of this study will provide valuable insights in developing a future ecolabel for Sri Lankan apparel industry which will be helpful to increase the market share of Sri Lankan apparels in the export market by providing support in informed decision making related to apparel sustainability for the customers.

**Keywords:** Ecolabel, Apparel industry, Gate to Gate, Fabrics