


Chapter 14

Sustainable Production Practices and Circular Economy: Evidence From Textile Manufacturing Units in Kerala

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ABSTRACT

The textile industries, while important to employment and economic growth, also contribute to environmental damage. However, adopting a 'closed loop' production and supply chain model minimises environmental risks. Moreover, a circular framework in the textile sector will pace the path towards sustainability. So, the study explored sustainable production practices in the textile manufacturing units in Kerala based on the priority selections made by the manufacturers. The Fuzzy analytical hierarchy procedure application on the data gathered from 300 sample

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units from five cities of Kerala revealed that though the industries have consistent circular economic potentials, the majority exhibit inconsistency in their decisions to follow the sustainable production models.

1. BACKGROUND

The Sustainable Development Goal (SDG-12.6) on sustainable production has gained momentum recently with the spread of the successful adoption of circular business practices by manufacturing industries. The circular business model brings production and consumption under the ‘reduce, reuse and recycle’ loop. With the increasing concerns and commitments towards mitigating environmental damage, manufacturing industries include circular business practices in their production and supply chain to achieve sustainable development goals. Moreover, circular economy practices increase resource efficiency by slowing, narrowing, and closing resource flows (Jørgensen & Remmen, 2018), easing manufacturers’ journey to achieve SDG goals. Circular economy intersects with sustainability by offering practices optimising sustainability, enabling more sustainable operations within business organisations (Arantes et al., 2022). So, a circular business model aims to create, deliver and capture economic value while minimising adverse environmental effects either by closing or by slowing the loop (Bocken & Konietzko, 2022)

The textile industry is one of the oldest and most significant sectors in the global economy. It encompasses various activities, from preparing and spinning fibre to manufacturing finished textile products. The extensive value chain equips the textile industry to provide materials for clothing, home furnishing and various industrial appliances. So, the industry’s market share is based on the end consumer price irrespective of the product’s geographical origin. As such, leading textile exporters in the international market are China, India, Germany and Turkey, where China generated the largest revenue in 2021.

India’s textile sector is a prominent part of the country’s industrial landscape, contributing 2% of GDP and more than 12% of manufacturing GDP and employing 45 million people directly and 60 million indirectly. Similarly, India produces around one million tonnes of textile waste. However, a significant portion of it is produced from households. In 2019, the United Nations Environment Programme introduced a Textile Flagship initiative to reduce unsustainable consumption practices and bring systematic changes towards sustainability and circularity in the textile sector. However, the textile sector’s complex business practices and supply chain pose challenges to effectively implementing upcycling and recycling practices in India. Though there are policy supports for promulgating and implementing sustainability in consumption practice and waste disposal, little attention has been given

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