

Registrar

## Notice for the PhD Viva-Voce Examination

Ms Sweta Jain (Registration Number: 1820075), PhD scholar at the School of Business and Management, CHRIST (Deemed to be University), Bangalore will defend her PhD thesis at the public viva-voce examination on Tuesday, 13 May 2025 at 2.30 pm in Room No. 044, Ground Floor, R & D Block, CHRIST (Deemed to be University), Bengaluru - 560029.

Title of the Thesis

Impact of Green Manufacturing on Apparel

**Manufacturing Industry** 

Discipline

: Management

:

:

External Examiner - I

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External Examiner - II

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The members of the Research Advisory Committee of the Scholar, the faculty members of the Department and the School, interested experts and research scholars of all the branches of research are cordially invited to attend this open viva-voce examination.

Place: Bengaluru Date: 07 May 2025

## **ABSTRACT**

The textile sector in India holds a significant historical legacy, as it is one of the oldest businesses in the Indian economy, with roots extending back several centuries. India contributes 2.3% of GDP and 13% of industrial output, making it the second-largest producer of clothing and apparel in the world. The Garment industry is also the second most polluting sector. The garment industry is defragmented and unorganized, so it is necessary to conduct systematic studies on green manufacturing. This study aims to investigate the constructs Green Manufacturing, Operational Performance, Environmental Performance, Economic Performance, Pressures, Green Training and Green Innovation in the apparel manufacturing export industry. In this study, Institutional Theory and the RBV framework is utilized. A survey method is used to collect data from 123 garment export units, and structural equation modelling (SEM) is used to analyze the results.

The research provides empirical proof of strong and positive impact of Global Competitiveness pressure on green manufacturing and comparatively a low impact of Production and Operation Pressure on green manufacturing. The study finds the strong and positive impact of Green Manufacturing on Green Training. The results from the study show a strong and positive impact of Green Training on Environmental Performance, It is evident from the study that Green Training has complementary partial mediation between Green Manufacturing and Environmental Performance. The study later shows that the strong and positive impact of Green Manufacturing on Green Innovation. It is evident from the research that Green Innovation has complementary partial mediation between Green Manufacturing and Environmental performance, Green Manufacturing and Operational Performance, and Green Manufacturing and Economic Performance. There is empirical evidence of the strong and positive impact of Green Innovation on Economic Performance, Operational Performance and Economic Performance. The results show the positive impact of Green Manufacturing on Environmental Performance. According to the research, clothing manufacturing companies who export their products should concentrate on Green Training and Green Innovation that encourage companies to adopt green practices. Green Innovation has more significant mediating impact compared to Green Training. The study will assist management, practitioners, and the environment manager in better understanding Green Manufacturing practices and developing strategic strategies to integrate sustainability and innovation into operations.

Keywords: garment, sustainability, innovation, training

## **Publications:**

- 1. Sweta Jain & Jacob Joseph Kalapurackal, (2023). A Systematic Review of Green Apparel Manufacturing. Environmental Research, Engineering and Management, 79(4), 124-133. https://doi.org/10.5755/j01.erem.79.4.34368
- 2. **Sweta Jain** & Jacob Joseph Kalapurackal, (2023). Green Innovation, Pressure, Green Training, and Green Manufacturing: Empirical evidence from the Indian apparel export industry. *The Scientific Temper*, 14(02), 294–302. <a href="https://doi.org/10.58414/SCIENTIFICTEMPER.2023.14.2.07">https://doi.org/10.58414/SCIENTIFICTEMPER.2023.14.2.07</a>
- 3. Sweta Jain, Jacob Joseph Kalapurackal, Vedha Balaji & Sriram M, (2024). Mediating Role of Green Training in Impact of Green Manufacturing on Performance in Apparel Industry. *Journal of the Textile Association* (JTA), 85(1). https://doi.org/10.5281/zenodo.11567426