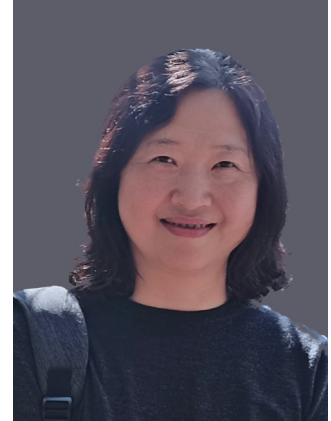**TBIS**

Topic of the Speech:
Developing a Green Development Evaluation System for Ethiopian Textile and Garment Industrial Parks

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Professor Xuemei Ding is a Professor in College of Fashion and Design, Donghua University. Her main teaching and research interests include Sustainable development in textile industry, as well as Fabric care theory & technology, which are supported/sponsored by National Natural Science Foundation of China (NSFC), World Wide Fund For Nature (WWF), Ministry of Science and Technology of China (MOST), Science and Technology Commission of Shanghai Municipality (STCSM), Clothing Industry Training Authority of Hong Kong (CITA), Procter & Gamble Co. (P&G), Unilever Co., Invista Textile Co. (INVISTA), BSH Electrical Appliances Co., Ltd. (BSH), HAIER Group, MIDEA Group, Jide Group, Esquel Group, Panasonic Co., Arcelik Group and so on.

She has been invited as keynote speakers and/or session chairs over 40 industrial or academic conferences. She has made numerous contributions including more than 400 academic journal papers, conference papers and book chapters, more than 30 Chinese Patents as well as 16 textile industrial standards.

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Developing a Green Development Evaluation System for Ethiopian Textile and Garment Industrial Parks

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ABSTRACT (NO MORE THAN 500 WORDS:)

The development of textile and garment (T&G) industrial parks in Ethiopia has yielded many promising results, yet numerous environmental management challenges persist. There is a crucial need for a set of evaluation indicators to guide the further green development of these parks. Scholars globally have established various quantitative evaluation indicator systems, but these do not accurately reflect the current state of Ethiopia's textile industry. This research introduces a quantitative evaluation system for the green development of Ethiopian T&G industrial parks, utilizing the Bayesian Best Worst Method (Bayesian BWM). This system is based on Ethiopian policy requirements and standards, as well as the green development needs of the textile industry, drawing from the eco-industrial park evaluation system of the United Nations Industrial Development Organization (UNIDO) and other key literature. The system comprises four criteria: park environmental management, energy usage, resource usage, and waste management, encompassing a total of 30 indicators. Using this system and actual data, the study quantitatively evaluates the Hawassa Industrial Park (HIP), the largest contributor to Ethiopia's T&G export proportion, thereby completing empirical research. The findings highlight the challenges in achieving Ethiopia's current environmental policy targets, primarily due to low transparency in park environmental management data and foreign exchange shortages. The study also notes that waste management practices require significant updates and improvements, and offers advice for accelerating green development in Ethiopian T&G industrial parks. Overall, this article presents a quantitative analysis based on ranking and adopts a top-down approach to establishing park indicator systems, tailored to Ethiopian national conditions and the textile and garment industry's current state. This methodology could be adapted for other countries and industries in developing their own evaluation indicator systems.