

# Unlocking Jute’s Potential: A Strategic Roadmap for Enhancing Productivity and Overcoming the Middle-Income Trap in Bangladesh

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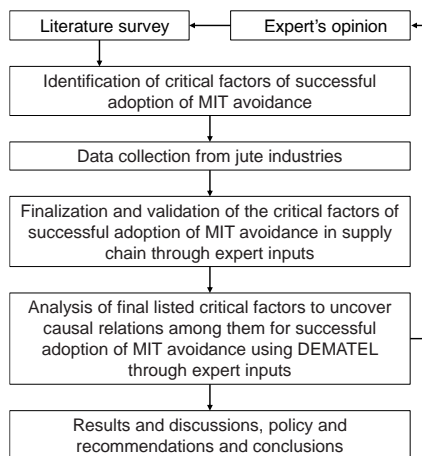
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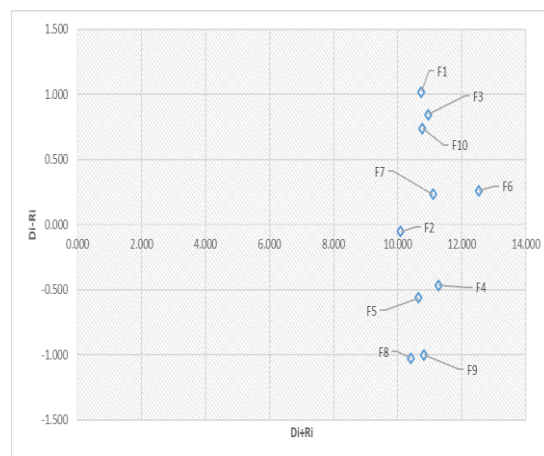
**Keywords:** Innovation-led Productivity, Jute Industry, Middle-Income Trap (MIT), TRIZ Methodology, DEMATEL Approach.

## Extended Abstract

This research uses TRIZ to innovate jute products, aiming to enhance quality, productivity, and competitiveness. DEMATEL identified 14 critical success factors (CSFs) to avoid the Middle-Income Trap (MIT). The study provides TRIZ and DEMATEL frameworks to guide jute industry stakeholders in adopting sustainable practices and maximizing the industry’s potential. This research investigates how innovation can bolster Bangladesh’s jute industry and prevent it from falling into the middle-income trap. By employing TRIZ, a systematic problem-solving methodology, the study aims to identify innovative solutions for enhancing productivity, quality, and competitiveness within the jute sector. Additionally, the research analyzes the contribution of the seven global innovation pillars, such as creative outputs, knowledge and technology outputs, and human capital, to driving innovation-led growth. Furthermore, it identifies bottlenecks that hinder economic development in the jute industry, assessing their impact on productivity and sustainability. Finally, the study evaluates the effectiveness of existing innovation policies in promoting sustainable growth and avoiding the middle-income trap.



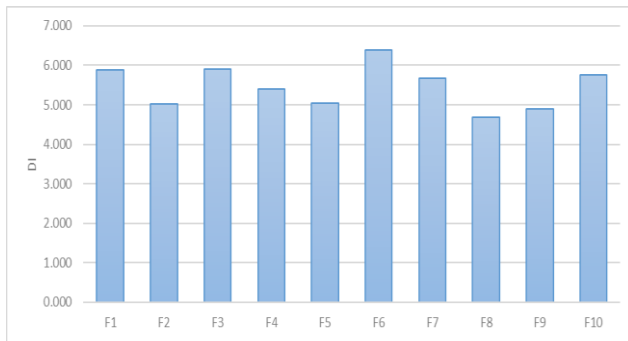
**Figure 1: Research Framework.**



**Figure 2: Causal Relationship Diagram.**

**Table 1: Experts’ feedback on critical success factors.**

Factor Codes	Factor Names	Number of Respondent	Cumulative	Cumulative %
F9	CSR	10	21	20.79%
F1	Green Design	9	30	29.70%
F6	Resident population	16	46	38.61%
F07	Reduction of fines for environmental disaster	8	54	46.53%
F13	Training and Education	8	62	54.46%
F10	Standards	7	69	68.32%
F03	Global Marketing	6	75	74.26%
F08	Organizational capabilities & efforts	5	80	79.21%
F4	Green Space Area	3	83	82.18%
F2	Environmental disaster	2	91	90.10%
F5	Technology granted by government	2	93	92.08%
F11	Green Manufacturing	2	95	94.06%
F12	Environmental Collaboration	2	97	96.04%
F14	Health and safety	2	99	98.02%



**Figure 3: Ranking of success factors.**

To avoid the middle-income trap, Bangladesh can apply DEMATEL to identify industry-specific CSFs; Explore other MCDM methods; Conduct more comprehensive research on CSFs; Analyze CSFs at the sector level; Foster a business-friendly environment; Attract FDI; Support knowledge acquisition and digital transformation; 8) Prioritize sustainability; and Monitor and evaluate innovation policies. By implementing these

recommendations, Bangladesh can leverage innovation to boost productivity and escape the middle-income trap.

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