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IMPACT OF TECHNICAL EFFICIENCY AND INPUT-DRIVEN GROWTH IN THE INDIAN FOOD PROCESSING SECTOR

ABSTRACT

Purpose - This study examines the performance of India's food processing sector by estimating its output growth, technical efficiency (TE) and input-driven growth (IDG). **Design/methodology/approach** - This study used panel data from six food processing manufacturing industries for the period 2000-01 to 2017-18. Technical efficiency and input-driven growth was measured using the parametric half-normal stochastic frontier production function. **Findings** - The findings of this study showed that the estimated average technical efficiency is 86.6%, which specifies that the Indian food processing sector is technically inefficient. In addition, the output growth rate is 5.5%, driven by high doses of inputs (5.7%), whereas there is no indication of constant returns to scale. However, the food processing sector has experienced more input-driven expansion than either technological or efficiency changes. **Research limitations/implications** - This study is limited to India's organized manufacturing food processing sector; the aggregate macro data at a three-digit level based on the national industrial classification (NIC) was used. This study provides robust estimates for industrialists and processors, as well as concrete policy formulations on how overdoses of inputs may lead to high exploitation of resources, whereas outputs can be augmented by implementing upgraded and new technologies. **Originality/value** - Previous research has estimated the total factor productivity and technical efficiency only in order to analyze the food sector's

performance, but none of the studies have evaluated the share of inputs in growth performance and efficiency. Therefore, this study contributes by measuring growth performance and the share of inputs in the growth performance of India's food processing sector.

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