

REVIEWER'S REPORT

Manuscript No.: IJAR-58011

Title: ECO-EFFICIENCY AND ENVIRONMENTAL IMPACT MEASUREMENT OF FLOUR-BASED PROCESSED CHICKEN PRODUCTION AT MSMEs IN JOMBOR, SUKOHARJO, INDONESIA

Recommendation:

Accept as it is

Accept after minor revision.....

Accept after major revision

Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality		x		
Techn. Quality			x	
Clarity		x		
Significance		x		

Reviewer's ID: JPR-171

Detailed Reviewer's Report

This study applies Life Cycle Assessment (LCA) and eco-efficiency analysis to flour-based chicken processing MSMEs in Jombor, Sukoharjo, Indonesia. The topic is relevant, and the integration of LCA with economic indicators is a strength. However, major revisions are required.

First, the methodology lacks critical details: the functional unit is not defined, system boundaries are vaguely described ("cradle-to-grave" but waste disposal pathways are not specified), and the life cycle inventory (LCI) data sources are not transparent (e.g., emission factors for electricity and LPG are cited but not linked to specific databases). Second, the selection of 10 MSMEs out of 37 is not justified; representativeness and potential bias are not discussed. Third, the eco-efficiency calculations use NPV but ignore discount rates and time horizons; the formulas are presented without clear inputs. Fourth, the results sections (Figures 2–4) are described but the figures themselves are missing from the submitted file, making interpretation impossible. Fifth, the conclusion claims that "all MSMEs fall into the affordable and sustainable category," but the EEI threshold (>1) is arbitrary and not critically examined. Sixth, the English language requires substantial editing for clarity and grammar.

The authors must provide complete figures, clarify methodological choices, justify sample selection, and temper overgeneralised claims. A major revision is necessary.