ISSN(O): 2320-5407 | ISSN(P): 3107-4928

International Journal of Advanced Research

Publisher's Name: Jana Publication and Research LLP

www.journalijar.com

REVIEWER'S REPORT

Manuscript No.: IJAR-55300

Title: PERFORMANCE EVALUATION OF AN INDIRECT NATU-RAL-CONVECTION SOLAR DRYER FOR BEEF DRYING IN ABÃCH, CHAD

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 Name: Dr. Hari Prashad Joshi

Detailed Reviewer's Report

Major Revisions Required:

The manuscript presents a valuable study on the design and evaluation of an indirect natural-convection solar dryer for beef in Abéché, Chad, addressing a pertinent food security issue. The work is well-motivated, the experimental design is generally sound, and the conclusions regarding the dryer's efficiency and advantages over open-air drying are supported by the data. However, significant revisions are required to enhance clarity, methodological rigor, and data presentation before the manuscript is suitable for publication. The primary concern is a major inconsistency in the experimental procedure. The methods state that measurements were taken from 8:00 a.m. to 4:00 p.m., yet the results indicate a total drying duration of 15–20 hours and data points up to 24 hours (Table 1). This discrepancy must be fully clarified and reconciled, as it fundamentally impacts the interpretation of the drying kinetics. Furthermore, the study lacks critical methodological details: the number of experimental replicates is not stated, undermining the statistical validity of the results, and the calculation of moisture content on Page 4 appears to be an illustrative example rather than reported experimental data, which is confusing.

Several presentation issues require correction. The "Acknowledgements" and "Conflicts of Interest" sections are erroneously duplicated. The reference to Figure 1 and the preceding discussion on lines 30-35 are fragmented and somewhat unclear, needing better integration with the study's narrative. Additionally, the manuscript would benefit from a more critical discussion that contextualizes the performance metrics (e.g., temperature rise, drying time) more deeply against prior studies cited in the literature review. In summary, while the core research is promising and relevant, these substantive issues pertaining to methodological reporting, data integrity, and manuscript preparation necessitate a major revision. The authors are encouraged to address these points comprehensively in a resubmission.