

Review Form 1.7

Journal Name:	Asian Food Science Journal
Manuscript Number:	Ms_AFSJ_106285
Title of the Manuscript:	DEVELOPMENT AND PERFORMANCE EVALUATION OF HYBRID-SOLAR DRYER FOR CASSAVA GRATE.
Type of the Article	Research Article Original

PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</p>	<p>Research addressing the development and performance of a hybrid solar dryer for drying cassava shavings is relevant, given the importance of food preservation in regions with a tropical climate. The summary fully covers the description of the methodology used, the results obtained, and the conclusions drawn from the evaluation of the performance of the dryer. The research investigated the performance of a hybrid solar dryer for drying grated cassava. The dryer consists of a drying chamber, a solar collector, a fan, a heating chamber, a 12V battery and a solar panel. Three cassava varieties (TMS96/1414, TMS92/0326 and TMS01/1368) were used for the drying experiments. The hybrid dryer maintained a constant drying temperature of about 50.26°C in the drying chamber compared to an ambient temperature of 26.69°C. The drying rate was faster in the hybrid dryer compared to solar and sun drying for all cassava varieties tested. The drying efficiency was higher in the hybrid dryer, ranging from 73.42% to 79.21% for the different varieties, compared to the solar drying efficiency of 44.53% to 48.38%. The hybrid dryer significantly reduced drying time by more than 50% compared to sun drying. Hybrid drying preserved the color and quality of grated cassava, while sun drying led to color changes and deterioration. Therefore, the hybrid solar dryer proved to be effective in fast and high-quality drying of grated cassava, with the potential to improve storage and transportation.</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	-----	
<p>Optional/General comments</p>	-----	

PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

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