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Journal Name:	**Journal of Engineering Research and Reports**
Manuscript Number:	**Ms_JERR_45548**
Title of the Manuscript:	**Development of an Energy Storage Chamber to Enhance Solar Drying of Grain at Night**
Type of the Article	**Original Research Article**

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty'**, provided the manuscript is scientifically robust and technically sound.
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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)*
Compulsory REVISION comments	**The reviewer wants the answers of the following questions.** 1. There are three stages in the storage chamber and number of sample is five; So, question arises during experiment whether all the samples were loaded at a time or separately. It is not clearly mentioned. 2. If samples were loaded at different days, then the environment were certainly different on each day. Then how to compare on a common basis? 3. How many times each sample was loaded is not mentioned. A single day value can never be used as a representative value, particularly when the sample is heterogeneous. 4. Since the trays are placed vertically one after another, then as shown in Fig. iii, when hot air flows from one side, it will not be distributed uniformly through the bed. There will be void space inside the drying chamber. As a result, the drying will not be uniform. Also, moisture removed from bottom tray, will affect the drying of the others. So, samples taken for moisture content test will be biased. Thus, it needs clarification, how samples were collected for testing. 5. The graphs shown in Fig. vi(a) shows that heat storage chamber temperature increases between 2 am to 4 am, which is maximum at 3 am. There is no explanation of this. In fact, there is no logic to increase the temperature when there is no radiation. Explanation is necessary. 6. In Fig. vi(c), there is a gradual increase of heat storage chamber temperature after 12am. It needs clear explanation of the fact. 7. In Fig. vi(d), the same situation of increasing heat storage chamber after 2 am. But clear explanation is given. Every figure should be explained separately. 8. Explanation of Fig. vii, is not justifiable, unless answer question 2 is given.	Author"s Comment 1. The five samples were loaded at the different times. 2. It is expected that there will be effect of varying climatic conditions. Therefore, the five samples were dried at closely similar atmospheric conditions to minimize this effect. 3. The samples were loaded once in a day, however, five different samples of grains were taken hourly from the dryer and the average of these five samples was determined to obtained the moisture content at that time. 4. The duct that connects the flat plate collector to the drying was centrally located to ensure uniform flow of air unto the three trays. The base of the dryer is adequately lagged to prevent heat and moisture losses through the base. Moisture contents reading of the samples were taken by inserting the probe of the moisture meter into the sample batches before the drying test so as to avoid opening and closing of the drying for moisture content reading. Moisture content readings are taken hourly using the moisture meter without opening the dryer chamber. 5. The temperature increase at night in Fig vi (a) was between 2 am to 3 am and not between 2 am to 4 am. The increase may be due to void spaces within the gravel in the heat storage chamber leading to heat build up at particular region in the storage chamber. The heat build up caused increase in temperature within storage chamber as temperature of storage was taken as average of temperature readings taken at 3 different points (front, middle and back) of the storage chamber. However, as heat is transferred from the storage chamber to the drying chamber with time, this unusual localized temperature differences is removed and the temperature of the storage chamber decreases as expected. However, the localized temperature difference tends be more pronounced when the valve is opened than when it is closed. 6. The same explanation as in 5 7. There was no increase in Fig vi(d), between 2 am and 3 am. What we have was constant temperature (30^o0) between these drying times.
Minor REVISION comments	1. There are some grammatical errors. For example: the very 1st sentence of the abstract; the 1st sentence of Introduction etc. So, It needs correction by an English Language expert. 2. The Figure numbering is not appropriate.	1 Agreed and effected 2 Agreed and effected
Optional/General comments	**The paper could be published only after the above questions are answered.**	

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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)*
Are there ethical issues in this manuscript?	*(If yes, Kindly please write down the ethical issues here in details)*	