Solar dryer in ghana

Solar dryer in ghana

All articles published by MDPI are made immediately available worldwide under an open access license. No special permission is required to reuse all or part of the article published by MDPI, including figures and tables. For articles published under an open access Creative Common CC BY license, any part of the article may be reused without permission provided that the original article is clearly cited. For more information, please refer to https://

Feature papers represent the most advanced research with significant potential for high impact in the field. A Feature Paper should be a substantial original Article that involves several techniques or approaches, provides an outlook for future research directions and describes possible research applications.

Editor''s Choice articles are based on recommendations by the scientific editors of MDPI journals from around the world. Editors select a small number of articles recently published in the journal that they believe will be particularly interesting to readers, or important in the respective research area. The aim is to provide a snapshot of some of the most exciting work published in the various research areas of the journal.

Baidhe, E.; Clementson, C.L.; Senyah, J.; Hammed, A. Appraisal of Post-Harvest Drying and Storage Operations in Africa: Perspectives on Enhancing Grain Quality. AgriEngineering 2024, 6, 3030-3057. https://doi /10.3390/agriengineering6030174

Baidhe E, Clementson CL, Senyah J, Hammed A. Appraisal of Post-Harvest Drying and Storage Operations in Africa: Perspectives on Enhancing Grain Quality. AgriEngineering. 2024; 6(3):3030-3057. https://doi /10.3390/agriengineering6030174

Baidhe, Emmanuel, Clairmont L. Clementson, Judith Senyah, and Ademola Hammed. 2024. "Appraisal of Post-Harvest Drying and Storage Operations in Africa: Perspectives on Enhancing Grain Quality" AgriEngineering 6, no. 3: 3030-3057. https://doi /10.3390/agriengineering6030174

Baidhe, E., Clementson, C. L., Senyah, J., & Hammed, A. (2024). Appraisal of Post-Harvest Drying and Storage Operations in Africa: Perspectives on Enhancing Grain Quality. AgriEngineering, 6(3), 3030-3057. https://doi /10.3390/agriengineering6030174

Active, passive, and hybrid solar-powered dryers with direct or indirect heat transfer techniques, as well as forced or natural air circulation, are shown in Fig. 1. It is acknowledged that the most crucial variable of the process is the air used for drying, which is hot and contains little moisture. Moreover, the drying rate rises as the drying air temperature and air velocity rise [14].

NCDs allow ambient air to flow through bottom-mounted adjustable vents. The air is heated inside the solar collector before rising into the chamber to dry the food. It then leaves through the chimney. Therefore, it is also known as a passive solar system. It does not use any mechanical equipment to regulate how much air enters the dryer and does not use any additional energy while it is in use [15, 16]. Figure 2 depicts the flow diagrams of natural convection solar dryers of both direct passive and direct active types.