

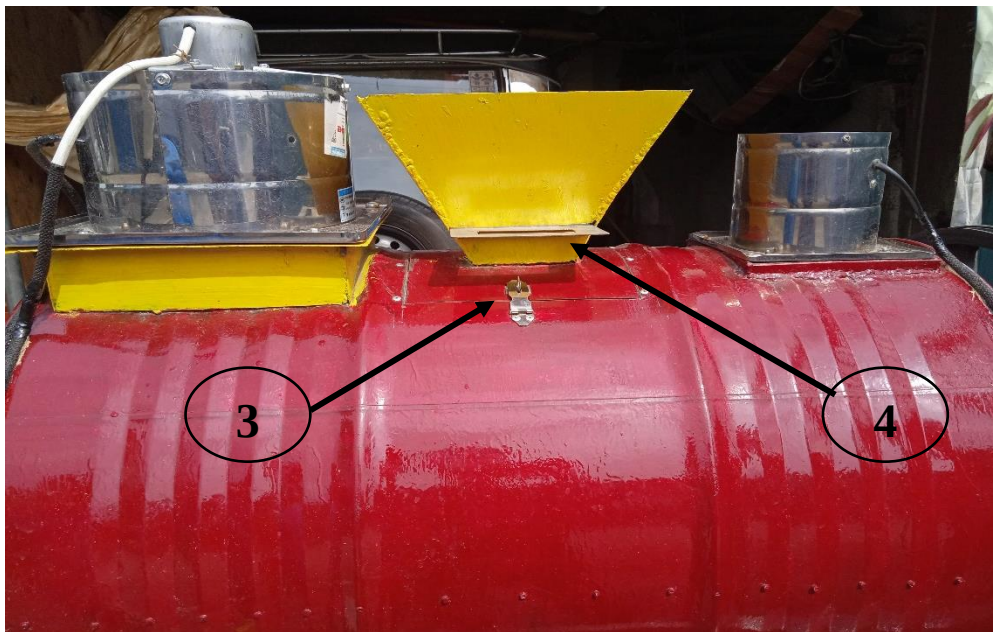
APPENDIX

User's Manual

1. Open the feed hopper
2. Open the inner drum cover.



3. Close the feed hopper
4. Remove its plate



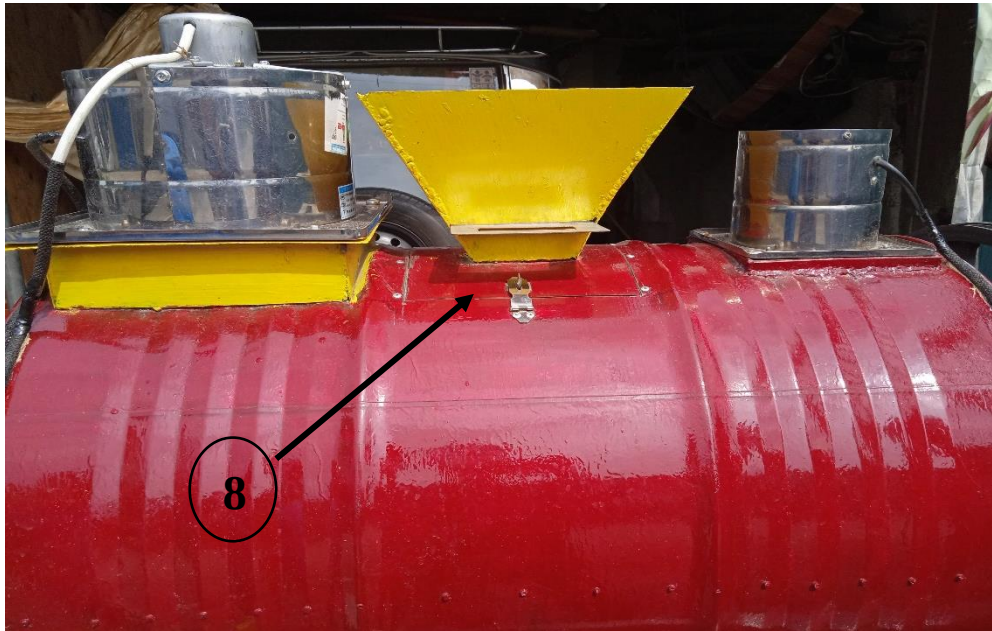
5. Put the rice grain to be dried inside the inner drum.



6. Open the feed hopper
7. Tightly close the inner drum cover.



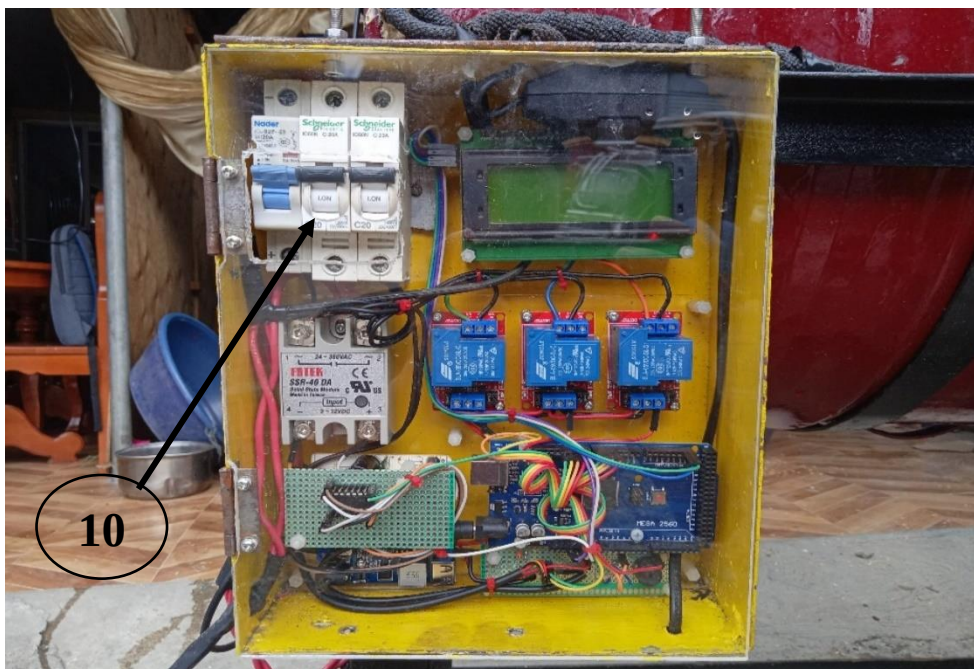
8. Close the feed hopper



9. Connect the power supply.



10. Turn on the motor, heater, blower, and exhaust fans.



11. Turn off the power before draining.



12. Open the outlet for draining.



Documentation of Drying Rice Grain

The glutinous rice has initial moisture content of 25.5% wet basis.



Twenty-five kilograms of glutinous rice is subjected for drying.



After 25 minutes (0.417 hour) the glutinous rice has a moisture content of 16.5%.



After 50 minutes (0.833 hour) the glutinous rice has a moisture content of 15.5 %.



After 75 minutes (1.25 hour) the glutinous rice has a moisture content of 15 %.



After 100 minutes (1.667 hour) the glutinous rice has a moisture content of 14.5 %.



After 115 minutes (1.917 hour) the glutinous rice has a moisture content of 14 %.



Drying the 40kg long grain rice with initial wet basis of 25%.



After 2 hours of continuous drying the wet basis becomes 14%.



The prototype of microcontroller-based rice grain dryer



Energy Reading Using the Smart Meter

