

ABSTRACT

One of the post-harvest processing of rice by farmers are drying grain, farmers usually do in a natural way, namely drying of grain drying in the sun. But this process has the disadvantage of drying such as very dependent on the weather, lack of hygiene is maintained, when the rainy season have come a long time to dry grain and grain loss occurs due to attack poultry.

At the end of the project has realized a grain dryers and grain issuing system automatically based microcontroller. Working principle of this device is to automatically grain drying with moisture detecting sensor SHT11 grain around. In addition this tool can be issued automatically based on the weight of grain desired through the keypad buttons, servo motors and load cell sensor for detecting heavy.

Result of the realization of grain dryers and grain issuing system automatically based microcontrollers can reduce grain moisture content by an average of 5.6% for grain drying experiments for 1 Kg 10 times with an average length of grain drying time 20 minutes 48 seconds.

Keywords: Dryer, Grain, Microcontroller, SHT11, Load Cell