

ABSTRACT

Supervision of the water level at the water gate in the rice fields is a job that is not too heavy. But if there is negligence in supervision would be very detrimental to farmers. Because supervision is not observed on the door leading to the paddy water is most likely when rainfall is very high fields cultivated by farmers will be inundated by water, causing crop failure.

Automatic water gate design process in the rice fields that will be used is a water level sensor circuit design, circuit microcontroller system using ATmega328P, DC motor driver circuit is used as a driving force floodgates to open and close, a series of warning alarm by using the buzzer as an omen when water exceeds the height limit the floodgates. With the support of software in a program such as Altium, AutoCAD and Arduino.

To anticipate the negligence of supervision and improve information water level then created a tool controlling sluice persawahan otomatis based microcontroller, the height floodgates can already be set according to the increase in water discharge, as well as the manufacture of door automatic water Effective Use potensio shear and pressure air which acts as a sensor to provide a DC motor drive command opens and closes the door.

Keywords: floodgates rice fields, Microcontroller, Motor DC