

ABSTRACT

With increasingly advanced technology, people are starting to incorporate technology in everyday life. This technology enabled to support human performance to get the job done more effectively and produce good quality. It also can be applied to the world of farming. For now, the technology has not penetrated into the world of farming is causing farmers to experience problems that are difficult to overcome. One is feeding the animals chicken.

On the implementation of this final project created a design and prototype automated chicken feed providers. This tool uses HC-SR04 Ultrasonic sensor for the measurement of foods high in reservoir, Load Cell sensors connected to the HX711 to measure the weight of food in the container, Motor Servo Sg90 to suppliers of food from the reservoir, Arduino Uno is used to control which controls the work system, LCD's the system displays measurement results, SIM800L to send sms. This system was designed to help the chicken farmers in feeding chickens with a reporting system using SMS.

Based on test results performed on the functionality of the system: 5 parts: container testing, valve testing, testing RTC, tank testing and testing SMS reporting. Container obtained test results with 100% accuracy, valve test results with 100% accuracy, RTC test results with 100% accuracy, the accuracy of the test results reservoir with 99.50%, and SMS reporting test results with 100% accuracy. Accuracy entire functionality testing on five sections of 100%. It can be concluded that this tool works well bias and with this tool can solve the problem of farmers in terms of reduction of HR and time efficiency.

Keyword : Arduino Uno, SIM800L, Sg90 Servo Motor, Load Cell HX711L, SMS, HC-SR04 Ultrasonic Sensor, LCD.