DESIGN AND BUILDING OF A WATER MONITORING SYSTEM AUTOMATIC CULTIVATION OF CATFISH IN A BUCKET BASED ON THE INTERNET OF THINGS (IOT)

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ABSTRACT

Catfish farming in urban environments is often faced with a number of challenges that make it difficult to develop. Significant space limitations in urban areas are one of the main obstacles. Cultivating catfish in buckets (Budikdamber) offers a practical solution for urban farmers. Even though it is efficient and practical, Budikdamber has obstacles in terms of effective monitoring and control. The method used is assembled using the NodeMCU ESP8266 controller and the Blynk application as the main control. To program this system, programming software is needed, namely the Arduino IDE application, which is used to enter programs to connect to the ESP8266. Blynk receives the data displayed by the user to the NodeMCU ESP8266 which has been connected via the Blynk application for remote information systems. This tool for designing a water circulation monitoring system for cultivating catfish in buckets automatically based on the internet of things has been tested 10 times at different levels. 100% success really helps farmers in regulating or controlling the water quality in catfish buckets.

Keywords : monitoring,cultivation,catfish,internet of things