ABSTRACT

In fish farming, water quality in the form of acidity (pH) and water temperature are two important aspects that must be maintained and considered. Other factors such as feeding management are also things that should not be ignored. The owner of the pond pays less attention to this aspect due to activities outside of pond maintenance, leaving the pond unattended. Therefore, the existence of a tool whose implementation is based on Internet of Things in the fisheries sector is expected to assist pond owners in overcoming these problems.

In this study the authors designed a monitoring that reads water temperature and pH parameters to monitor water quality in catfish ponds. With the integration of sensors in the monitoring to the Internet of Things , it is hoped that it will be able to help catfish farmers in overcoming water quality monitoring. Then, the monitoring from the reviewed pool will be passed on to the user. Then there is also a feeding system where the system designed will provide feed on a scheduled basis and is expected to support the development and growth of catfish.

The system is installed in a pool measuring 14 m long, 14 m wide, and 1m high. The test results obtained from the pool in the form of a pH sensor accuracy of 95.43% with an error, a temperature sensor with an accuracy of 98.92% with an error. The delay test on the monitoring system is 30,40375 ms and packet loss 0%. In the feeding system, load cell with an accuracy of 98.34% with a 1.66% error and an actuator accuracy value of 99.512% with an error.

Keywords: **Catfish, Temperature, Water pH, Fish Feed, Monitoring, Internet Of Things.**