

## **ABSTRACT**

*One of the freshwater fish products that has many fans in Indonesia is catfish (Clarias sp.). This causes catfish to be widely cultivated in Indonesia so that in 2018 catfish production can reach 1.81 million tons and an increase of 114.8% from the previous year. However, there are several factors that can interfere with production activities, including the pH of the pond water that is not suitable and the provision of catfish feed with the wrong dose. Modernization of livestock is expected to assist farmers in increasing the level of fish production. The application of this system is one way to assist the farm in increasing production activities. This system was tested on a pond 1m in diameter and 1m in height. The test results obtained from the pond are sensor accuracy of  $\pm 0.050968$  with a 1% error rate, can provide feed with an accuracy of  $\pm 1.21$  with 0.54% error rate and have network reliability for wireless monitoring systems. The growth rate of catfish obtained in this system was 1.961% with a survival rate of 90,625%.*

**Keyword: Catfish, pH Water, Fish Feed, Quality of Service, Monitoring, Controlling**