## *ABSTRACT*

*Water pollution is one of the factors causing the failure of rice growth. Contaminated water can cause plants to become susceptible to disease, so that rice plants are not exposed to water pollution, it requires an automation system to monitor water turbidity and control the discharge gate in rice field irrigation. Based on these problems, the researchers conducted research related to tools for monitoring water turbidity and controlling rice field irrigation drains based on the Internet of Things. In this study, a turbidity sensor is used which functions as a water turbidity detector, NodeMCU ESP8266 as a data processor and Blynk as an application to monitor the turbidity system of rice irrigation. Blynk cloud and NodeMCU ESP8266 must be connected to each other so that in monitoring water turbidity it can be operated through Blynk on a smartphone or on the Blynk website. In this study, the turbidity sensor reading value was obtained in the form of the ADC value. A value of less than 10 indicates the condition of clean water, while ADC values of 10 to 70 indicate cloudy water conditions, if the ADC value obtained from the measurement is more than 70 it indicates the condition of dirty water and the servo motor will open the irrigation water gate leading to the sewer.*



***Keywords:*** *Internet of Things, Turbidity, Blynk cloud, ESP8266*