Abstract

According to the Central Bureau of Statistics (BPS), the conversion of agricultural land to an increasingly extensive area of land is dwindling, 2018 Indonesia has experienced a decline in agricultural land compared to 2017, from 7.74 million hectares to 7.1 million hectares, in addition to agricultural land in Indonesia depletion, agricultural land experiences nutrient poverty in the soil. From the limited land of agricultural production also the lack of nutrient content in the soil has encouraged the cultivation of agriculture and fisheries in narrow land or limited containers. The water content contained in fish pond water is often used for farming because it has the content of the nutrients needed by the plant itself. In this study a system was developed that utilizes fish pond water that can do automatic watering using soil moisture sensors and temperature as a determining parameter in watering and analyzing the results of soil moisture that has been predicted with better accuracy using the *Fuzzy Logic* classification. The resulting data is sent to the server via WiFi 8266 for monitoring. The results obtained from these experiments where the system is able to work with an accuracy rate of 80%.