

## **ABSTRACT**

*Agriculture in Indonesia is one of the keys to Indonesia's economy. Although agriculture is the key to Indonesia's economy, there are several things that we must pay attention to in the agricultural sector in this country. Data from the Central Statistics Agency (BPS) recorded rice production of 31.31 million tons throughout 2019 and decreased by 7.75% from production in the previous year which resulted in 33.94 million tons from farmers. This causes that there is something wrong with Indonesian farmers so that the yields produced by the farmers are decreasing rapidly. But the farmers still give their best for their crops. Nowadays technology is very helpful for Indonesian farmers. Mobility is one of human behavior, a person does mobility because there are needs that need to be met. The types of mobility that will increase in the future are population and labor mobility. This happens because of the better means of transportation and communication. There needs to be support with advice and infrastructure that guarantees human life. Technological sophistication today makes it easier and eases the work of farmers who used to still use makeshift tools used by farmers, with technology and anti-pest spraying tools to help farmers caring for rice and other crops so that farmers are very facilitated and very helpful in the processing and maintenance of each rice and other crops. With this technology, it is hoped that it can improve and provide the best for farmers so that the harvest they produce increases and is very beneficial for the farmers themselves and the country. Based on the above explanation, the authors designed a monitoring system and an anti-pest sprayer for rice based on the bluetooth communication. This system will be a solution for farmers so that rice and crops can produce good yields. Testing accuracy on the Bluetooth HC-06, firebase library and Arduino Uno.*

**Keywords:** *Spray Tool, Arduino Uno, Bluetooth HC-06, Firebase*