ABSTRACT

Landslides are natural disasters that occur very often in mountainous areas, especially in Indonesia. Landslides are one of the most adverse natural disasters. So far, the early warning system for landslides in Indonesia is still very minimal. Of the thousands of landslide-prone locations, only a few locations have been equipped with an early warning system, therefore a landslide early detection system is needed. In this Final Project, soil moisture sensor and accelerometer & gyroscope sensors are transmitted through LoRa communication which contains soil shift data and water moisture data. Based on tests on this system can send data to LoRa receivers with signal strengths ranging from -86 dB to -105 dB.

Keywords: Landslide, LoRa, Sensors, IoT.