IMPLEMENTATION OF SMS-BASED MONITORING OF SOIL HEIGHT AND SURFACE HUMIDITY IN PALM PLANT

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ABSTRACT

In an effort to help oil palm land owners monitor their oil palm land, because the land in the Bengkalis area is prone to flooding, monitoring is needed so that oil palm land owners can easily find out what the condition of the land on their oil palm land is. This tool uses solar panels and batteries as a source but can use a power bank as an alternative. Altitude and humidity sensors are the main components of this tool and the brain of this tool is the Arduino Uno. From the results of testing SMS sending and SMS requests, different data was obtained, namely that the delay in sending SMS was faster than requesting SMS. The longest delay for sending an SMS is 7.21s, while for SMS requests the longest delay is 44 minutes 29s.

Keywords: Altitude sensor, humidity sensor, Arduino Uno, Solar panel, Battery