DESIGN AND CONSTRUCTION OF IOT BASED FISH WEIGHING EQUIPMENT IN TALAGA RAYA DISTRICT

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ABSTRACT

A digital scale is a measuring tool for measuring the weight of objects or substances with a digital display. Digital scales are used in various fields, from trade, industry to service companies. In Talaga Raya District, fishermen face difficulties in recording weighings because errors often occur which result in losses. To overcome this problem, the author designed and implemented an Internet of Things (IoT) based digital scale which is able to provide accuracy, efficiency and reliability in recording fish weight and managing data on fishermen's catches. The working scale system starts with a loadcell sensor which detects the mass of the load, then the analog data obtained is converted to digital by the HX711 module and forwarded to the ESP8266 microcontroller using a WiFi network for sending data to the Thinger io platform. The data read by the sensor is displayed on the scale display and Thinger io where the data from the weighing results is stored in thinger io.

Keywords: Digital scales, load cells, Internet of Things (IoT), Thinger.io