V.S.B.ENGINEERING COLLEGE, KARUR

Department of Information Technology

LITERATURE SURVEY TITLE : IOT based smart crop protection system for agriculture

Domine Name: Internet of Things

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## ABSTRACT

This will be an integrated strategy in the IOT space created for sensitive agriculture that is moving forward with its arrangements using open source software and low-power hardware [1]. The goal of this project is to produce a monitoring system for farm security against animal assaults and environmental circumstances related to climate change [4]. Smart farming usually makes use of Internet of Things (IoT) advancements to highlight the grade of agriculture [12]. This project effort includes a positioner and several types of sensors, controllers, and WSN for the ARM Cortex- The main component of the categorization is a board that uses 700mA or 3W of electricity. The board is interfaced with a variety of sensors, including the DHT 11 Humidity & Temperature Sensor, PIR Sensor, LDR Sensor, HC-SR04 Ultrasonic Sensor, and cameras.

INTRODUCTION

Smart farming frequently uses IoT (Internet of Things) trends to raise the level of agriculture [2]. However, in comparison to global standards, our productivity continues to be extremely low.[1] Societies after rural areas move to urban places for her lucrative trade in addition to Cannot think of crofting. To pay for the solution, mild smart irrigation systems are used in detail. despite finding a solution for moisture-related problems for different types of plants Weather Temperature, humidity, and moisture levels are challenging to measure manually. Frequently [9]a new system built on the cloud of effects is presented to overcome all of these (IoT). Wildlife. Requirements overlap laypeople, costing the populace and the agricultural field. Wild creatures regularly destroy crop eminence [20]. The lack of productivity may last for many years of fencing. Fences are frequently used as trains, albeit [8]. Consequently, earlier Examining local legislation restrictions is crucial before choosing a suitable fence [3]. The material and structure have an impact on how high-quality a fence is [10]. Considering its composition and method of manufacture Everlasting fences can survive up to 30 years in some cases. Prior to purchasing electrical fences, meaningful to confirm that they are permitted to be used in the designated region, as well as for defence against

endangered species of animals [12]. Additionally, it is advised that electrical fences be labelled with Any possible human contact should end immediately. weather conditions watch the temperature and the humidity

Age distribution map of agricultural employment population
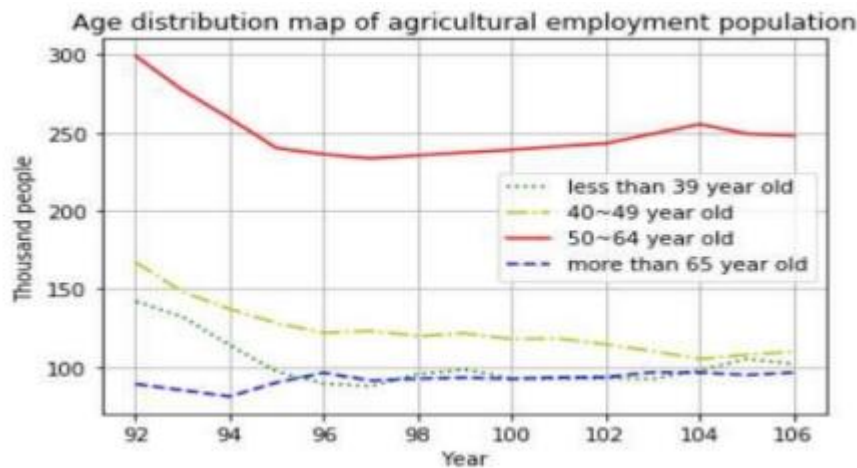
The goal is to provide a monitoring system for crop safety, animal outbreaks, and environmental conditions. This helps to reduce physical effort and stretch, which would otherwise be necessary if the farmers themselves had to pay for crop protection with their constant labour. Physical management [16]. Wildlife frequently destroys eminence crops, which results in annual Plant manufacturing decreases, causing growers to suffer financial losses [19]. Agriculturalist Due to lower yield, suicide is a tremendous hassle [21]. This poor crop is the result of two factors. most important factors, including crop damage caused by untamed animals and crop damage caused by climatic circumstances [27]. These location-specific SMSes will be treasured by the ranchers [4].

LITERATURE SURVEY

Smart farming frequently makes use of IOT characteristics to raise the level of agricultural [2]. Agriculture is the foundation that holds up the overall commercial development of our nation. In contrast, our production is incredibly poor by global standards [31]. People from rural areas are drawn to cities for other lucrative industries because they are unable to focus on agriculture [14]. The existing traditional agricultural practises have significant drawbacks, including more expensive and labor-intensive field monitoring [8]. In particular, small-scale smart irrigation systems are used to address moisture-related problems while also providing a solution for a range of plants. It is challenging to manually assess weather factors including temperature, humidity, and wetness on a regular basis [4]. Farmer suicide is becoming a major issue. due to two main causes: Crop destruction caused by uncontrollable weather, uncontrollable animal attacks, small species, insects, some dangerous snakes, and weather conditions. In the current method, electrical fence is utilised to stop wild animals from attacking agricultural vegetation and killing animals [6]. The main goal is to offer an excellent solution to this issue, minimising losses while giving farmers a precise estimate of crop yield [26]. The two main causes of this low production are crop damage caused by natural objects and crop destruction by wild animals [18]. The major goal of this project is to provide an excellent solution to this issue, so that the financial losses sustained by supporting our farmers are reduced to obtain an accurate crop output [22].

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