LITERATURE SURVEY

TITLE :

Smart Farmer- IOT Enabled Smart Farming Application

ABSTRACT

IoT is the information and communication technology sector is being enhanced to facilitate the farmers, croppers and related users of intelligent services. Technological revolution integrates the development of smart devices and IoT services. To feed the ever growing global population, the agriculture industry needs to be extended. Internet of Things helps in smart farming solution to increase the agricultural production. Smart farming provides the enhanced facility for process automation and evaluation and waste reduction. As a result, all these factors increase the quality and quantity of the food products and decrease the production cost and smart farming system that is built for monitoring the crop field will help the farmers with the sensors and operate the irrigation system. The farmers can monitor the field conditions from anywhere. This paper outlines the promising solutions applied in the agriculture.

INTRODUCTION

Internet of Things is a dynamic global information network, supports several applications for users such as healthcare organizations, security, smart transports, traffic management, E-payment, smart farming etc. In agricultural industry, technological advancements lead the comfortable pathway for the farmers. quality, weather conditions, crop growth, and crop damage using wireless monitoring sensors with cloud based platform. Farmers can monitor all the sensor parameters by using a web or mobile application even if the farmer is not near his field. Watering the crop is one of the important tasks for the farmers.

LITERATURE SURVEY

The author [1] proposed an idea on Farming as a major input sector for economic development of any country. Livelihood of the majority of the population of countries like India depends on agriculture. In this project, it is proposed to develop a Smart Farming System that uses the advantages of cutting edge technologies such as IoT, Wireless Sensor Network and Cloud computing to help farmers enhance the way farming is done. Using sensors like temperature, humidity, moisture etc. are used to get information about the field and help farmers to make precise decisions on insights and recommendations based on the collected data.

The author[2] discusses various models employed in Farming and proposes Smart Digi-farming models which focus on farming using IoT (Internet of Things), Mobile application for the dissemination of farming and commercial information and online sale of produce. Training on the latest fertilizers, farming tools and digitization in agriculture will attract youth towards farming and making India self-sufficient in food grains. Happiness Index of farmers is measured and improved through this model which drives the farmers away from suicidal tendencies and ushers in confidence, productivity and changes the lifestyle of the farmer.

The author [3] proposed The Internet of Things (IoT) has changed the definition of smart farming and enhanced it's capabilities to monitor and assess crop and soil quality; to plan planting locations to optimize resources and land area.

The Low-Power Wide-Area Network (LPWAN) technologies have enhanced these capabilities by increasing the wireless communication range, by eliminating the dependency of Backhaul networks and by reducing power consumption. In this paper, we have presented an experimental analysis of LPWAN literature with the support of simulation and actual implementation of a Long Range Wide Area Network (LoRaWAN) based IoT network for smart farming.

The author[4] describes , on Rural and urban areas in India face a variety of comparable problems within the domain of agriculture, which calls for certainly comparative answers for being coordinated towards finding these issues. The purpose of this concept is to analyze the ability of IoT techniques in relation to impoverishment in these areas, besides the requirements known in these commodities and with stress on farming. This work analyzes samples of an internet of things to modify the farming desires of the commodities for the region to maximize the yield production.

REFERENCES

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