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. 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:

IoT 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. Farm owners can utilize wireless IoT applications to collect data regarding the location, well-being, and health of their cattle. This information helps to prevent the spread of disease and also lowers labour costs.

LITERATURE SURVEY:

The author describes [1] The farming of agriculture has started past 12000 years back, Neolithic age gave birth of civilization, Farming and later being continued as traditional farming practices. India being an agrarian's country, Mostly Indian farming are dependent on rains, soil, dampness and environment challenges. Our farmers upgraded to modern state of art technology in cultivation. It is the time that Indian farmer need to introduce the Smart Agricultural systems for higher crop yield. The productivity with compilation of data from sensors, actuators and modern electronic gadgets the farmer can monitor agricultural fields. Smart Agriculture can forecast weather data, switching ON the pump motor acknowledging the dampness of soil terms of moisture levels with help of sensors which are interfaced to process module Arduino-UNO. The Smart agriculture system can be operated from anywhere

with help of networking technology. On joining process in research and development in Smart Agriculture& Artificial Intelligence can be cutting edge technology in data compiling and resource optimization. The pest & insects controls that protects damaging the crop and also optimisation resources utilisation can be breakthrough.

The author describes [2] Farming is the backbone of the economy and it is the fundamental method for occupation. The large population of the world depends on farming for living day to day life. Around 70% of the Indian population depends on cultivation. Most of the cultivation cannot be productive only by physical activities so have to be handled by innovative technologies. Therefore, they use IoT innovation and SMS notification to address the critical part of farming. The past method of incorporating a keen water supply system with smart ideas. This undertaking is a follow up to a past method whose highlight features incorporates a keen water system with excellent control and insightful basic leadership in terms of exact continuous field information which regulates temperature, moisture and soil dampness of a particular crop. Controlling of every one of these activities will be monitored by PC with Internet and the tasks being performed by interfacing sensors and Arduino. With the observation results decisions are to be made.

The author describes [3] Internet of Things (IoT) technology has brought revolution to each and every field of the common man's life by making everything smart and intelligent. IoT refers to a network of things which make a self-configuring network. The development of Intelligent Smart Farming IoT based devices is day by day turning the face of agriculture production by not only enhancing it but also making it cost-effective and reducing wastage. The aim / objective of this report is to propose an IoT based Smart Farming System assisting farmers in getting Live Data (Temperature, Soil Moisture) for efficient environment monitoring which will enable them to increase their overall yield and quality of products. The IoT based Smart Farming System being proposed via this report is integrated with Arduino Technology mixed with different Sensors and a Wi-Fi module producing live data feed that can be obtained online from Things speak.com. The product being proposed is tested on Live Agriculture Fields giving high accuracy over 98% in data feeds.

The author describes [4] Today's different types of technologies, techniques and tools are used in the agriculture sector. To improve productivity, efficiency and reduce the time, cost and human intervention, there is a need for a new technology called the Internet of Things. To automate the agricultural activities like water management, soil monitoring, crop management, livestock monitoring etc. different types of sensor are used. Smart Greenhouses protect the plants from extreme weather. To control all these operations remote smart

devices, computers connected with the internet, sensor, camera, micro-controller etc. are used. Growth in the agriculture sector affects the economic condition of the country. This paper focuses on the Role of IoT in Agriculture that defines Smart Farming.

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