

# **SMARTFARMER -IOT ENABLE SMART FARMING APPLICATION**

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Harendra Singh Negi Published on "International Journal of Engineering and advanced technology 2022". India's rural and urban areas share a number of agricultural concerns, necessitating coordinated efforts to address these issues, which asks for unquestionably comparative solutions. The goal of this concept is to examine the potential of IoT technologies in relation to poverty in these areas, in addition to the established requirements in these commodities and with emphasis on agriculture. This study examines internet-of-things sample data to alter regional farming preferences for specific commodities in order to increase yield production. In India, the majority of the population relies on agriculture, and a sizable portion of the country's income comes from it. For our nation, which depends on imports, automating the agricultural process is one of the most important tasks.

C K Gomathy Published on "International Journal of Scientific Research in Engineering and Management 2022" With everything becoming smart and connected, the Internet of Things touches every aspect of the lives of the average person. The term "internet of things" describes a network of autonomously configuring objects. The basic goal of smart farming is to increase agricultural output while using less resources and less labour. The development of internet of things (IoT)-based gadgets for thinking smart farming is changing the face of agricultural output on a daily basis by not only improving it but also making it more efficient and cutting waste. Forecast data indicates that the global population will grow by 25% by

2050 compared to the current population. Since we would have twice as much food as before, crop production should rise.

Dinesh Varma Kanumri Published on “Bournemouth University 2020” With the aid of technology, the agriculture sector has advanced significantly, becoming more data-driven and intelligent. Agriculture was among many industries that underwent radical change as a result of the Internet of Things' quick development. Such a major transformation destroys current farming methods and generates new opportunities as well as some difficulties. In this article, the potential of wireless sensors and IoT in agriculture is highlighted. Additionally, some difficulties are anticipated when integrating this approach with conventional farming practises. In-depth explanations are provided for the IoT tools and methods utilised in farm applications. We can recognise contemporary IoT trends in agriculture based on this article.

Ritika Srivastava Published on “Krishna Engineering College 2020” IOT sensors have the ability to provide information about agricultural fields and subsequently take action based on user input, making smart agriculture an emerging concept. The feature of this study is the creation of a system that uses sensors and an Arduino UNO board to monitor temperature, moisture levels, water levels, and even movement in the field that could harm crops. IOT sensors have the ability to provide information about agricultural fields and subsequently take action based on user input, making smart agriculture an emerging concept. The initiative attempts to utilise smart agriculture using automation and emerging technology, such as IOT. As requirements and technology change after hardware development, it is necessary to update the software. The new version of the programme refers to the changed hardware.

Jash Doshi Published on “Pandit Deendayal Petroleum University, Gandhinagar 2019” Every area will be impacted by the Internet of Things (IoT) in the future since it will make everything sentient, which will affect everyone's daily lives. It is a network made up of many devices that can configure itself. The use of IoT in Smart Farming is changing the face of traditional agricultural practises by making them more cost-effective for

farmers and lowering crop loss in addition to optimising them. The goal is to suggest a piece of technology that can send messages to farmers across many platforms. The solution will help farmers by providing them with real-time data from the farms (temperature, humidity, soil moisture, UV index, and IR) so they can take the necessary actions to practise smart farming while also enhancing crop yields and conserving resources (water, fertilizers).

M P Jyothi Published on “International Conference on Recent Advances in Electronics and Communication Technology in 2017” IoT, or the Internet of Things, is essential to smart agriculture. Because IoT sensors may provide information about their agricultural fields, smart farming is a new concept. The goal of the article is to use IoT and smart agriculture using emerging technology. The main component to increase the production of productive crops is to monitor environmental conditions. This paper's feature involves employing CC3200 single chip-based sensors to monitor the temperature and humidity in agricultural fields. The camera is connected to the CC3200 so that pictures can be taken and sent through MMS to the farmers' mobile devices over Wi-Fi.

Aditi Mehta Published on “Department of information Technology 2016” There is tremendous growth potential for the embedded business. Additionally, the way ahead is becoming more obvious every day. It's time for us to begin developing IOT solutions and offering value to our clients. By 2020, the IoT is anticipated to connect 28 billion things to the internet, including industrial machinery, autos, appliances, and wearable technology like smart watches. The development of an agricultural nation depends heavily on agriculture. In India, around 70% of the population is dependent on agriculture, and this industry generates one-third of the country's GDP. Agriculture-related issues have historically impeded the nation's progress. Modernizing the current traditional methods of agriculture is the only way to solve this issue.

Zahair Ahamad Published on “, Rayalaseema University in 2018” Unmanned Aerial Vehicles are what are known as drones (UAVs). In other terms, drones are flying objects that may be remotely or autonomously programmed, either by a ground station or a remote control.

robotic technologies on a network. Sadly, drones haven't significantly changed farming techniques, at least not yet. Up to now. Recently, there has been a lot of activity on the use of drones in agriculture and precision farming. In order to reduce the cost of production, considerable technologies have been created to automate agriculture.