

## LITERATURE SURVEY-I

**NO: 1**

**TITLE:** Smart Farming-IOT based Future Architecture

**AUTHORS:** Vijaya Saraswathi R, Sridharani J, Saranya Chowdary P, Nikhil K, Sri Harshitha M, Mahanth Sai K

**PUBLISHING YEAR:** 2022

**CONTENT:**

Agriculture is backbone of any country. About 60% of our country's population works in agriculture or the primary sector. It contributes more to our country's GDP. It employs the majority of India's population. The internet of things research presents a framework in which farmers may obtain extensive information on the soil, crops growing in specific areas, and agricultural yield and productivity. By utilizing resource optimization and smart planning, this technology-based farming solution will assist farmers in making wise agricultural decisions. The development of IOT based intelligent Smart Farming using smart devices is changing the agriculture production by not only increasing the quality and yield but also to make farming cost effective. The goal of this smart Agriculture or farming is to get live data like temperature, soil moisture and humidity to monitor the surrounding environment. All of this is accomplished with the use of temperature, humidity, and moisture sensors. The system being proposed by this paper is done using microcontroller and various sensors. This system is capable of monitoring the parameters in various soil conditions.

**NO: 2**

**TITLE:** IOT Based Monitoring System in Smart Agriculture

**AUTHORS:** S. R. Prathibha, Anupama hongal, M. P. Jyothi

**PUBLISHING YEAR:** 2017

**CONTENT:**

Internet of Things (IoT) plays a crucial role in smart agriculture. Smart farming is an emerging concept, because IoT sensors capable of providing information about their agriculture fields. The paper aims making use of evolving technology i.e. IoT and smart agriculture using automation. Monitoring environmental factors is the major factor to improve the yield of the efficient crops. The feature of this paper includes monitoring temperature and humidity in agricultural field through sensors using CC3200 single chip. Camera is interfaced with CC3200 to capture images and send that pictures through MMS to farmers mobile using Wi-Fi.

**NO: 3**

**TITLE:** IOT Based Smart Agriculture System

**AUTHORS:** Suhanth G, Sujatha S

**PUBLISHING YEAR:** 2018

**CONTENT:**

Smart agriculture is an emerging concept, because IOT sensors are capable of providing information about agriculture fields and then act upon based on the user input. In this Paper, it is proposed to develop a Smart agriculture System that uses advantages of cutting edge technologies such as Arduino, IOT and Wireless Sensor Network. The paper aims at making use of evolving technology i.e. IOT and smart agriculture using automation. Monitoring environmental conditions is the major factor to improve yield of the efficient crops. The feature of this paper includes development of a system which can monitor temperature, humidity, moisture and even the movement of animals which may destroy the crops in agricultural field through sensors using Arduino board and in case of any discrepancy send a SMS notification as well as a notification on the application developed for the same to the farmer's smartphone using Wi-Fi/3G/4G. The system has a duplex communication link based on a cellular-Internet interface that allows for data inspection and irrigation scheduling to be programmed through an android application.

Because of its energy autonomy and low cost, the system has the potential to be useful in water limited geographically isolated areas.

**NO:** 4

**TITLE:** Mart Agriculture Using Internet of Things

**AUTHORS:** Mohamed Rawidean Mohd Kassim, Ahmed Nizar Harun, Ismail Mat Yusoff.

**PUBLISHING YEAR:** 2018

**CONTENT:**

Recent researches hypothetically shown the potential of Internet of Things (IoT) to change major industries for a better world, which includes its impact towards the agriculture industry. Farming industry must grasp IoT to feed 9.6 billion of global population by 2050. Challenges such as extreme weather conditions and rising climate change shall be overcome to fulfil the demand for food. Smart farming based on IoT technologies will enable growers and farmers to reduce waste and enhance productivity ranging from the quantity of fertilizer utilized to the number of journeys the farm vehicles have made. So, what is smart farming? Smart farming is a capital-intensive and hi-tech system of growing food cleanly and sustainable for the masses. It is the application of modern ICT (Information and Communication Technologies) into agriculture. In this paper, the hardware and software of the IoT for smart farming will be presented besides sharing the successful results.