

## Will IOT Satisfy India's Hunger?

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Abstract - The Internet of Things is the idea of connecting real things to each other. It is a way for users to organize, retrieve and consume information by default over the next few years. In digital agriculture. Various applications in Internet of Things (IoT) (crop growth monitoring and selection). Support irrigation decisions between different applications). Agriculture through sensor network Connect with the Internet of Things to create the right environment between farmers and crops. Analyze data and make informed decisions with the Internet of Things, regardless of geographic boundaries Almost all phases of agriculture: crop selection, machinery selection support, land preparation, seed selection, seed planting, irrigation, crop development, fertilization and harvesting. Apart from many independent aspects of soil research, weather forecasting, pesticides and storage facilities. Can be integrated into decision-making processes such as transportation and market demand. Intelligent Agriculture is a good example of computing everywhere. Computing is everywhere basic concepts of all concepts developed in the near future, now. proposed system.

Index Terms – Introduction, Agriculture Monitoring System, Proposed System

### I. INTRODUCTION

Agriculture is an important part of the country's economic development. Agriculture is essential. For food and ingredients for life on Earth. Agriculture plays an important role in childbirth. Large-scale agricultural employment development is essential for national development. Farming continue to play an important role in economic growth. Three-quarters of India's active population related to agriculture and related fields. In most countries, farmers use traditional agriculture. The crop and fruit yield did not increase, but on the contrary, the crop decreased daily in India , The Vidyalpa district of Maharashtra faces the same problem. It may be possible to develop

agriculture automation replaces humans with machines that lead to more information about agriculture. Reduce the environment, the intensity of agricultural labor, rational use of agricultural resources, reduce production costs it will bring a better environmental environment. Agricultural concerns in three main areas: Inadequate supply (irrigation), crop attack of pests and insects, third, failure of proper storage products that can be attacked by pests and rodents. So, using technology the above solution improves production. The IOT concept can be used in agriculture among them, the smart nodes include the use of sensors, RFID, GSM / GPS, ZigBee, and other wireless devices with Internet stack built-in device to detect agricultural parameters and send it to a base station or the Internet. The wireless sensor network collects data and provides information about the environmental parameters sent to the cloud. This is useful for remote monitoring and analysis. Researchers in agriculture suggested an IoT-based structure that monitors agricultural management systems. This document provides information on basic IoT concepts and past work this is done in the agricultural sector, and is monitored and controlled using the Internet of Things and wireless sensor networks Agricultural parameters.

### II. AGRICULTURE MONITORING SYSTEM

Today, many organizations and government departments are interested in implementation. Technology for measuring agricultural parameters. Manual Factor Collection Required it is intermittent, does not persist, and creates a variety of remedies, which make it difficult to control agriculture environment. Reduce the time and effort required for agricultural control by using the Internet of things and wireless sensor nodes environment. The Internet of Things also prevents the loss of agricultural parameter databases and stores it on storage devices, Long-lived cloud can

be monitored at important places without putting people in a dangerous situation. Reduce response time of case control systems, improve crop quality control, Production cost This technology solves the problems of water management, mechanical and intellectual agriculture, high quality farming, high yield, no pollution. In agriculture, there are many factors such as soil.

Humidity, soil nutrients, pH values, rainfall, temperature, air humidity, luminous density, carbon dioxide concentrations, this parameter can be monitored in real time using the Internet of Things. These organizations and researchers are investigating the root cause we tried to develop an effective system that helps reduce performance and increase productivity.

### III. PROPOSED SYSTEM

Most research to date has not been considered feasible. Measures that can be taken to reduce losses effect of toxic gases. In this proposed system invented air pollution monitoring based on the Internet of Things tires that use Google Cloud to monitor air quality. Use sensors to measure air quality in real time cloud computing parameter platformer Data processing. The system generates an alert when: Air quality deteriorates beyond acceptable limits. Yeah weather conditions are detected in university environments level may implement preentive measures reduce the potential risks for students, staff and the environment. In addition, analyze the cause of the increase contaminants in an instant potentially at risk of extremely high concentrations of air pollutants. The rest of the proposed arrangement is systematic. System design for air quality control system. The air quality control system proposed in this work is a set of 4 main sensors and IoT panel based on ESP 8266. Some important features to consider to select the Internet of Things platform for a specific application memory size, number of general-purpose input pins, terminal connections such as SPI, I2C, USART connectivity functions such as Ethernet, Wi-Fi, and Bluetooth the ESP8266, like ZigBee, is one of the most powerful compliant IoT board that meets current requirements the demand. 32-bit RISC CPUs consist of: Tensilica Xtensa LX106, 64K internal memory, 96K memory 4 MB data storage and flash memory. Google script create your WiFi network through the connection module Ashf8266. The proposed IoT architecture for internal and external use The first thing is achieved by an air quality sensor, Processed with 40 pin PIC18F45K22. The microcontroller has 5 ports and 3 timers supports multiple communication protocols. Of some

important protocols supported are parallel and sequential protocols. Protocol and Internal Integrated Circuits (I2C) gateway is built to send data to the cloud using Google IoT Cloud ESP8266 Connection Module platform gateway works with TCP / IP protocol. Sensor data is converted to IP packets and transmitted data sent over Wi-Fi and network is saved processed by Google Cloud, Wind decreases when quality falls below a certain threshold.

### IV. CONCLUSION

The IoT in agriculture is at an early stage in India, but we are still using the technology. If the expected farmer gets proper training in smartphone technology, doing a lot of farming without a visit there basically helps farmers live connect to the farm anytime, anywhere. It also helps to increase human effort. Increase productivity along with farmers' economies. So with a fully equipped program agriculture in the Internet of Things can provide a better view of the next generation and make India better in the coming future.

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