

A Comprehensive Survey on Internet of Things based Agriculture

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Abstract: Agriculture is the source of food and livelihood of maximum population across the country. The traditional farming activities are time consuming and leads to wastage of resources such as water, seeds, fertilizers etc., The farmers are lagging in estimating the right amount of resources to be utilized efficiently for farming as well as failing to predict what crops to grow to meet current market needs. These challenges can be overcome with the help of modern internet technology. IoT is one of the emerging and promising internet technologies which can be applied in modern agriculture. IoT is the integration of devices and technologies such as Wireless sensor networks, sensors, cameras, moving vehicles, gateway devices, microcontrollers, solenoid valves, protocols, cloud etc., This technology automates the farming activities by reducing human intervention. By IoT, a farmer can predict period of seed harvesting to cutting of crops. Also, earlier detection of crop diseases and status of crop growth is notified to the farmers periodically via mobile apps. In this paper we survey the different applications of IoT based agriculture.

Keywords: IoT (Internet of Things), Precision Agriculture, Smart Agriculture, Agriculture, Food Security, IoT, Smart Farming

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