

IoT Based Smart Agriculture Monitoring System

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Abstract: Agriculture plays an important role in the development of any country. Around 70–75% of the Indian population depend on agriculture and 1/3rd of the capital of the country comes through farming. There have been several issues in concern with agriculture that were hindering the growth and development of the country due to migration of the people from rural to urban. To overcome this problem, the paradigm is toward smart agriculture using several techniques like Internet of Things and big data analysis. These technologies have emerged and modified the cultivation system. By incorporating sensors that study the environment humidity, temperature make cultivation possible by saving farmers time and effort by adding sensors. With the application of IoT, it is anticipated that 28 billion things are going to be connected through Internet and one such being agriculture. The present system is implemented for smart farming using Internet of Things (IoT) sensors, thereby gathering information about the conditions of the crop needs and automatically controlling resulting in improved yield and efficient crop, and the work is implemented using Arduino Uno along with temperature, moisture, soil dryness, and rainfall detector. Using this system, one can monitor from any location and carry out cultivation.

Keywords: Agriculture

REFERENCES

- [1]. <https://www.researchgate.net>
- [2]. <https://www.wikipedia.org>
- [3]. <https://www.rapidonline.com>
- [4]. <https://www.schematics.com>
- [5]. <https://www.batteryuniversity.com>
- [6]. <https://www.thingspeak.com>
- [7]. <https://www.youtube.com>