

S NO	TITLE	Authors	Abstract	Drawbacks
1	Smart farm and monitoring system for measuring the Environmental condition using wireless sensor network - IOT Technology in farming	Tharindu Madushan Bandara  Mansoor RAZA	Internet of things (IoT) gives a new proportion of smart farming and agriculture territory. Because with the development of the current world, the internet of things field has peaked with modern technology and modern techniques. In the modern world, IoT is used in every domain like smart city, smart university, smart car park system, etc. This paper is about the implementation of the smart farm. IoT concept helps in cost-efficient farming activities like crop and other resource management. With a wireless sensor network, it is easy to connect with every sensor node placed in the farming environment. Also, with the wireless sensor network, it can connect with long-distance ranges. With the help of a sensor network, it can collect the data from the farming environment and analyze it according to the pre-defined values. The proposed system used IoT sensors to collect the data are soil moisture sensors, temperature sensors, water volume sensors, etc. According to the existing system analysis, the proposed solution contains a smart farm environment and a real-time monitoring system with the wireless sensor network for node connectivity. The proposed system provides a more reliable and flexible smart concept for the farmers, and it is a simple architecture that contains the IoT sensors that collect the data from the farm field and transfer those data through wireless sensor network to the central server and according to the input data, the primary server assigning the task to the particular devices.	Needs more investment and does not provide specific analysis for farmers.
2	Smart Farming – IOT in Agriculture	Rahul Dagar, Subhranil Som, Sunil Kumar Khatri	IoT is a revolutionary technology that represents the future of communication & computing. These days IoT is used in every field like smart homes, smart traffic control smart cities etc. The area of implementation of IoT is vast and can be implemented in every field. This paper is about the implementation of IoT in Agriculture. IoT helps in better crop management, better resource management, cost efficient agriculture, improved quality and quantity, crop monitoring and field monitoring etc. can be done. The IoT sensors used in proposed model are air temperature sensor, soil pH sensor, soil moisture sensor, humidity sensor, water volume sensor etc. In this paper I surveyed typical agriculture methods used by farmers these days and what are the problems they face, I visited poly houses for further more information about new technologies in farming. The proposed model is a simple architecture of IoT sensors that collect	Bounded only to monitoring and there is no web application or SMS for fast notification as we may not have our Internet connections on always.

			information and send it over the Wi-Fi network to the server, there server can take actions depending on the information.	
3	Implement Smart Farm with IoT Technology	Chiyurl Yoon, Miyoung Huh, Shin-Gak Kang, Juyoung Park, Changkyu Lee	With the advent of Internet of Things (IoT) and industrialization, the development of Information Technology (IT) has led to various studies not only in industry but also in agriculture. Especially, IoT technology can overcome distance and place constraints of wired communication systems used in existing farms, and can expect agricultural IT development from automation of agricultural data collection. In this paper, smart farm system using low power Bluetooth and Low Power Wide Area Networks (LPWAN) communication modules including the wired communication network used in the existing farm was constructed. In addition, the system implements the monitoring and control functions using the MQ Telemetry Transport (MQTT) communication method, which is an IoT dedicated protocol, thereby enhancing the possibility of development of agricultural IoT.	This can cause limitations as we may not be able to monitor through other means.
4	Smart Farming Using IOT	Amandeep ,Arshia Bhattacharjee , Paboni Das ,Debjit Basu ,Somudit Roy ,Spandan Ghosh ,Sayan Saha ,Souvik Pain ,Sourav Dey	Even today, different developing countries are also using traditional methods and backward techniques in agriculture sector. Little or very less technological advancement is found here that has increased the production efficiency significantly. To increase the productivity, a novel design approach is presented in this paper. Smart farming with the help of Internet of Things (IOT) has been designed. A remote controlled vehicle operates on both automatic and manual modes, for various agriculture operations like spraying, cutting, weeding etc. The controller keeps monitoring the temperature, humidity, soil condition and accordingly supplies water to the field.	No online web app or mobile applications where we can see the current situation of the monitored environment, uses remote controlled vehicle which needs high investment