

LITERATURE REVIEW:

- 1. Patil VC, Al-Gaadi KA, Biradar DP, Rangaswamy M (2012) Internet of things (IoT) and cloud computing for agriculture: an overview. *Agro Informatics Precis Agric* (i):292–296.**

- ❖ This research work explains the importance of cloud computing in IoT and the importance of these two technologies in Agricultural System.
- ❖ In this paper, it is discussed that IoT is closely correlated to cloud computing. The relation between IoT and cloud computing was explained in such a way that IoT gets influential computing tools with cloud computing.
- ❖ In this research work, an agricultural information cloud is assembled. In this agricultural information cloud, smart agriculture system is constructed through the assemblage of the Internet of Things and RFID.
- ❖ Component of IoT generates a large amount of data like data generated by using RFID, sensors, wireless communication etc. this large amount of data handled by agricultural information cloud.
- ❖ It is concluded that, in the agricultural information network, hardware resources are integrated into the resource pool for achieving the dynamic distribution of resources and to balance the load, it improves the efficiency of resource use.

II. Mohanraj I, Ashokumar K, Naren J (2016) Field monitoring and automation using IOT in agriculture domain. Procedia Comput Sci 93:931–939.

- ❖ In this paper, an application prototype for precision farming using a wireless sensor network with an IoT cloud is proposed.
- ❖ In this work, an alert system for the control of water stress of plants using IoT technology was presented.
- ❖ The first part of this paper described the steps of the creation of the decision support system intended for an agricultural community in order to be able to estimate the quantities of water required.
- ❖ For irrigation management, the farmer will on the benefit from a dashboard software in the form of a graph, to monitor in real time the variations of the soil conditions and on the other hand, a process of notification by SMS will be transmitted via the application when a critical level is reached to avoid water stress.
- ❖ This application can be improved to make it a very sophisticated one envisages the integration of the method of evapotranspiration to calculate the water requirement of a plant per day in the system of decision support.

III. Yan-E D (2011) Design of intelligent agriculture management information system based on IoT. In: Proceedings of the 4th international conference on intelligent computation technology automation ICICTA 2011, vol 1, pp 1045–1049.

- ❖ In this research work, many challenges related to the agricultural domain were, addressed. An architecture was also framed for meeting these challenges.
- ❖ According to the text of this paper, farmers should be guided on the right time during different stages of crop growth.
- ❖ In this research work, a knowledge base is created. This knowledge base has various crop details. These crop details speak about knowledge acquisition, market availability, geospatial data flow and the weather prediction data.
- ❖ Monitoring module includes monitoring of various stages of growing plant, calamity check, planning for irrigation, crop profit calculation, etc. Per day need of water of a plant is calculated using evapotranspiration method.
- ❖ This method is based on the devised algorithm. At last, a comparative study was prepared among several applications existing developed system, having properties like efficiency, the knowledge base, reliability and monitoring modules.

IV. Bo Y, Wang H (2011) The application of cloud computing and the internet of things in agriculture and forestry. In: Proceeding of the 2011 international joint conference on service science IJCSS 2011, pp 168–172.

- ❖ This paper discusses the various applications of IoT and cloud computing in the field of agriculture and forestry.
- ❖ According to the text, the use of IoT plays an important role in smart agriculture.
- ❖ The basic technologies of IoT like laser scanner, RFID, photoacoustic electromagnetic sensors, etc. these technologies can be used to make great innovations in agricultural.
- ❖ Basically in agricultural information transmission, precise irrigation, intelligent cultivation control, agricultural product safety, and many more. This paper also focuses some applications of IoT in forestry.
- ❖ IoT can play an important role in forest identification and wood tracking and its management.
- ❖ Finally, this paper concludes that the integration of IoT and cloud computing has become a tendency.