

## **VILLAGE4.0: FOOD DISTRIBUTION SYSTEM**

<sup>1st</sup> Poosarla Naga Suryapadma Namrata

Department of Electronics and Communication Engineering  
Amrita Vishwa Vidyapeetham, Bengaluru, India

<sup>2nd</sup> Sirigireddy Venkata Siva Poojitha

Department of Electronics and Communication Engineering  
Amrita Vishwa Vidyapeetham, Bengaluru, India

<sup>3rd</sup> Yeddula Ashritha

Department of Electronics and Communication Engineering  
Amrita Vishwa Vidyapeetham, Bengaluru, India

<sup>4th</sup> Dr.Pooja Kenchetty P

Department of Electronics and Communication Engineering  
Amrita Vishwa Vidyapeetham, Bengaluru, India

In this paper, Agricultural Internet of Things (IoT) has been identified as a key driver of change in agricultural production by increasing production and quality, decreasing cost of labour and farmers' revenue prompting agricultural modernization and intelligent. Some publications have focused on the system architecture of agricultural IoT, which follows a structure of perception layer, network layer and application layer, depending on sensing technology, communication technology, data analysis technology, cloud technology and automation technology. However, there remain challenges like high costs of entry, data management, data from different systems not being compatible, and security concerns that limit the general uptake. The uses of the technology in precision farming, smart irrigations, animals tracking and supply logistics are some of the examples of this versatility. The future thus holds great promise with the expectation of improvement on connectivity through the 5G, incorporation of AI, being green through sustainability and affordability through cost down getting IoT devices into the hands of more people. Therefore, in this paper, we are considering food distribution system (FDS), in which IoT play the role of backbone with keypad authentication, servo controlling, LCD feedback, and LED indication for convenience, security, and effectiveness. Thus, as long as the IoT project under discussion is promoting equity, responsibility, and cleanliness, especially in the cases of limited accessibility, it serves societal needs and improves the quality of living. Essentially, these are the factors that have to be tackled for IoT based agricultural and food distribution systems to make a long term success.