National Conference and Exhibition on Rural Innovations

# ADVANCEMENT IN AGRICULTURE USING 5G TECHNOLOGY

**Mrs. G. Rajarajeshwari[a], G. Manoranjitham[b], S. Nishanthini[c], S. Parameshwari[d]**
Assistant Professor[a], UG Student[b,c,d],
Department of Electronics and Communication Engineering,
SSM Institute of Engineering and Technology, Dindigul
**Corresponding Author Name & Email: G. Manoranjitham & gopalmano58@gmail.com**

**Abstract**

Smart farming and precision agriculture rely on the different components of IOT, such as sensors, drones and robotic devices. IOT in agriculture is the network of interconnected devices that corresponds in real time, simultaneously, to gather, analyse and transfer the data which, ultimately, generate a decision to be taken by the farmer. The availability of 4G/3G does not support the precision practices in real time due to the bandwidth, connectivity and the speed of the data-transfer issues. Further, 5G technology in the agriculture sector has put its greater influence in real time monitoring, unmanned aerial vehicle, virtual consultation and predictive maintenance, artificially intelligent robotics, and data analytics and cloud repositories. Conclusively, the speed, connectivity, scalability and processing power, and limitations can be made with the availability of 5G structures.

**Keywords---5G, Precision Agriculture, 6G, Real-Time Monitoring.**

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

ISBN 978-93-91347-59-8