

# Smart Agriculturing Based on KSK Approach: A Novel AI-Driven-IoT(AIIoT) Based Decision-Making Approach

Dinesh Dattatraya Rankhamb<sup>1</sup>, Surekha Ramesh Raut<sup>2</sup>, Amol suresh Velapure<sup>3</sup>,

Assistant professor, MIT College of Railway Engineering and Research Barshi, Maharashtra, India<sup>1,2,3</sup>  
dinesh.rankhamb@mitcorer.edu.in<sup>1</sup>, surekha.raut@mitcorer.edu.in<sup>2</sup>, amol.velapure@mitcorer.edu.in<sup>3</sup>

**Abstract:** *An enormous change is taking place in the agriculture industry as a result of the introduction of the Internet of Things (AIIoT), which is powered by artificial intelligence and provides farmers with unparalleled automation capabilities and insights. The purpose of this research is to present a comprehensive review of artificial intelligence and the internet of things (AIIoT) in smart agriculture, focussing on its applications, benefits, and consequences for decision-making. The concept of smart agricultural decision-making refers to a breakthrough method that enables farmers to optimise their farm operations while also making decisions that are well-informed. Farmers are able to increase crop yields while simultaneously reducing costs and hazards when they make use of advanced analytics, real-time data, and decision-making tools. The development of smart agriculture will result in farmers having increased decision-making authority, which will ultimately lead to an agricultural sector that is more sustainable and productive. The Internet of Things (IoT) and artificial intelligence (AI) in smart agriculture is a cutting-edge technology that has the potential to be a game-changer in terms of how we produce and consume food. Farmers may be able to improve agricultural yields and quality, streamline operations, and contribute to a food supply chain that is more efficient and sustainable if they use artificial intelligence and the internet of things. In spite of the fact that there are still certain problems that need to be cleared up, the Internet of Things (IoT) offers numerous advantages for smart agriculture, and its implementation is anticipated to increase in the years to come. The KSK technique, also known as the Knowledge-Sensors-Knowledge approach, is a suggestion made by Dr. Kutubuddin S. Kazi, who is also using his name. The output of the KSK technique results in an accuracy of 99.9% and a recall of 97.9%, respectively.*

**Keywords:** KSK approach, AIIoT, AI, Smart Agriculturing, KK approach, Sensors