

# Application of Artificial Neural Network in Agriculture

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**Abstract:** *The growing need for efficient and sustainable farming methods has resulted in the use of Artificial Neural Networks (ANNs) as a contemporary approach to maximizing crop yield. This study investigates how ANNs, modeled after the human brain, can be used to simulate intricate patterns between variables like climate, soil quality, and agricultural methods to accurately forecast crop yields. ANN systems use data such as soil pH, rainfall, and temperature to deliver useful predictions that help farmers make timely decisions. In general, ANNs prove to be a promising technology for converting conventional farming into a more data-intensive, intelligent process in agricultural technology.*

**Keywords:** Artificial Neural Networks, Agriculture, Crop Yield Prediction, Precision Farming, Machine Learning

