

# Prediction of Crop and Fertilizer Recommendation using Machine Learning and E-Commerce in Agriculture

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**Abstract:** *As we know that, India stands second as largest population country in the world and main occupation of people in India is agriculture. Farmers are using same traditional farming methods repeatedly without trying new methods of farming using technology and they are applying various fertilizers in random quantity without knowing the deficient content and quantity. So, this is directly affecting on crop quality as well as crop production and also causes the soil infertility because of various fertilizers are been used due to sudden changes in climatic conditions and damages the crops. So, we have developed a system using machine learning algorithms for the welfare of farmers and will be used as guide or helping hands for farmer for their query or problem related to farming. The proposed system accuracy metrics is more as compared to previous systems as the accuracy of the system will play an important role in these types of systems. And also, the system provides crop prediction, fertilizer recommendation, e-commerce site for farmers, disease detection of crops using image processing, facilities of applying for crop insurance and also farmers can share their experience with other farmers.*

**Keywords:** Crop Prediction, Machine Learning, RFA, Image Processing

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