



**NARASARAOPETA ENGINEERING COLLEGE**

**(AUTONOMOUS)**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**2023-2024**

<b>BATCH NUMBER</b>	BB2
<b>TEAM MEMBERS</b>	Shaik Sadhik Ali(20471A05B5) Shaik Shahid(20471A05B7) Savarapu Sukumar(20471A05B1) Kari Srihari(20471A0590)
<b>GUIDE</b>	SHAIK RAFI ,M.Tech,(phd)
<b>TITLE</b>	Crop Recommender System Using Machine Learning Approach
<b>DOMAIN/TECHNOLOGY</b>	MACHINE LEARNING
<b>BASE PAPER LINK</b>	<a href="https://ieeexplore.ieee.org/document/9418351">https://ieeexplore.ieee.org/document/9418351</a>
<b>DATASET LINK</b>	<a href="https://www.kaggle.com/datasets/atharvaingle/crop-recommendation-dataset">https://www.kaggle.com/datasets/atharvaingle/crop-recommendation-dataset</a>
<b>SOFTWARE REQUIREMENTS</b>	Browser: Any latest browser like Chrome Operating System: Windows 10, 64 bit OS Coding Language: Python Python Distribution: Anaconda, Flask Platform:Google COLAB

<b>HARDWARE REQUIREMENTS</b>	Processor: Intel®Core™I7-7500UCPU@ 2.70GH Hard Disk: 1TB minimum RAM: 12 GB Cache Memory: 4 MB
<b>ABSTRACT</b>	<p>Agriculture and its allied sectors are undoubtedly the largest providers of livelihoods in rural India. The agriculture sector is also a significant contributor factor to the country's Gross Domestic Product (GDP). Blessing to the country is the overwhelming size of the agricultural sector. However, regrettable is the yield per hectare of crops in comparison to international standards. This is one of the possible causes for a higher suicide rate among marginal farmers in India. This paper proposes a viable and user-friendly yield prediction system for the farmers. The proposed system provides connectivity to farmers via a mobile application. GPS helps to identify the user location. The user provides the area &amp; soil type as input. Machine learning algorithms allow choosing the most profitable crop list or predicting the crop yield for a user-selected crop. To predict the crop yield, selected Machine Learning algorithms such as decision trees, Logistic regression and random forests, to analyse the data and recommendation the crops. The proposed system helpful to the farmers to maximize their profits.</p>