

Big Data and Analytics Project

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**To analyse the appropriate season and
environment for crop cultivation**

SYNOPSIS



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Table of Contents:

- i. About the Project
- ii. Motivation
- iii. Future Prospects
- iv. Hardware Requirements
- v. Software Requirements

About the Project:

- We will analyse the perfect season to cultivate the specific types of crops, On the basis of soil fertility, moisture contained in that area, availability of water and availability of sunlight in different areas. We will also tell the transportation costs for the different states.
- How much cost it will going to take and how much profit the farmers will get.
- Farmers will only be required to enter their UID(Aadhar Number) and best crop according to different seasons will be displayed according to his location.

Motivation:

We know that many farmers face problems to select crop for specific season, what cost it will take in whole season and how much will they earn from it. Some middle people take advantage of it and make a fool of them. In some cases, farmers also committed suicides after the failure of their crops. So with our project, we would like to better assist farmers in analyzing best crop for cultivating in a specific season.

Future Prospects:

We will try to increase the dataset by adding in more fields so that we can cover much more constraints and possibilities and we'll be able to give more accurate choices to the farmers in choosing crops for a specific season in a particular state.

We will make the website easy to use by adding more native and regional languages known to farmers so that more of them will be able to easily use the website.

We will better our Machine Learning algorithms and in near future we'll be able to tell which pesticide will work for which infected crop and what precautions one should take to prevent it from happening.

We will try to make mobile app for this website that can even run on low-end devices so that it is accessible to every farmer.

Requirements:

Hardware:

- 1 TB Memory
- 8 GB RAM
- i3 processor

Software:

- Hadoop
- MongoDB
- R Studio
- Linux OS

