Your Field, Our Expertise

CROP ADVISOR

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ⓘ About Us

- I've created a machine learning based crop prediction model.
- It uses soil metrics (nitrogen, phosphorous, potassium, pH) and weather data (temperature, humidity, rainfall) to precisely recommend the optimal crop for a specific field.
- The dataset comprises varied soil measurements from different fields, with the 'label' column indicating the best crop based on these measurements.
- The project aims to develop a powerful multi-class classification model, integrating weather data to enhance predictive accuracy.

NEED FOR CROP ADVISOR

Selecting the appropriate Corp and maximizing crop yield is a crucial seasonal decision made by farmers, it includes the methods like :

Consultation with Experts:

- While farmers may seek advice from agricultural extension officers, agronomists, or other experts, this constitutes a minority, estimated at around **20-30% or less**. Factors such as access, awareness, finances, and farm scale influence this trend.

Local Knowledge and Experience:

- In rural areas, farmers heavily rely on generational knowledge, with over **70-80%** making decisions based on family traditions and personal experience.

Improper crop selection can lead to reduced yields, economic losses, and challenges in soil health and sustainability

1254++

Harvest

Why Crop Advisor

Increased Profitability:

Better crop selection, reduced input costs, and improved yields contribute to increased profitability and economic stability.

Soil Health and Sustainability:

Informed decisions from the model contribute to healthier soil and sustainable farming practices.

Financial Stability:

By avoiding improper crop choices, farmers mitigate economic losses and improve financial stability.

Enhanced Yields:

The crop prediction model aids in optimizing crop selection, leading to increased yields.

Libraries used

01

Data Analysis

- Pandas
- NumPy
- Matplotlib
- Seaborn

02

Prediction

- Scikit-learn

03

ML Algorithm Used

- Random Forest Classifier

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THANK YOU

Checkout My Project at :

LINK