

ESTIMATE THE CROP YIELD USING DATA ANALYTICS

PROJECT PHASE I-PROPOSED SOLUTION

1. Problem Statement:

- The frequent changes in climate conditions are affecting more in crop production.
- Most of the forecasts are seasonal and are available around 1-2 months before the crop Harvesting.
- Farmers are benefited if recommendation and forecast of crop are available before sowing of crop.

2. Idea/Solution description:

- Utilization of data analysis associated with IBM Cognos results in estimation of crop yield with its activities such as including the climatic data, soil data into account.
- Contribution of this project is to improve the agricultural productivity and provide the crop recommendation to the farmers.
- By performing Weather indices-based Regression Analysis ,Seasonal analysis ,Time series analysis.

3. Novelty / Uniqueness:

- Improve operational efficiency and increase productivity and profitability.
- Draw analytical insights on expenses, inventory and crop growth.
- Prediction of the outcome is the remarkable advantage of our project.

4. Social Impact/Customer Satisfaction:

- Extreme weather events such as High temperature , Heavy storms ,Droughts
- Results of our projects are more efficient.
- It has to be available to all the farmers who need help that can be solved from this application and it has to be simple and understandable by the enduser.

5. Business Model:

- When the model reaching out the target market, it provides all the services it can to the customers in producing a great yield.
- Based on analytics farmers can take better decisions for healthy crop production.
 - Increasing productivity
 - Reducing Waste
 - Improving Profits

6. Scalability of the Solution:

- To analyse the relationship of crop yield, monthly average temperature, and monthly average rainfall.
- To analyses crop yield with respect to seasonal weather parameters.
- The quality of the system reassures the expansion without hampering the existing workflow and ensure an increase in the output or efficiency of the process.