

## Assignment 1:- market access and Price forecast for Farmers.

Define a problem statement:-

in day to day life longest problems faced by farmers are market access and price forecasting for farmers so, This project aims to empower farmers by providing them with the tools and information they need to navigate the complexities of the agricultural market ultimately leading to better financial outcomes and increased sustainability in the sector.

### 1) executive Summary Snapshot.

This project focuses on developing a robust application aimed at improving market access and price forecasting for farmers. The primary objective is to leverage technology to provide farmers with timely and accurate market information, enabling them to make informed decisions about when and where to sell their produce. The application will utilize data analytics, machine learning algorithms, and real-time market data to forecast prices and suggest optimal selling points, thus maximizing farmers' profits and minimizing their risks.

### 2) Project Description

The agriculture sector faces significant challenges in market access to real-time market price volatility. Farmers often lack access to real-time



market information, which leads to Suboptimal decision making

\* market Access information:

The application will offer farmers access to a database of local and regional markets, including information on demand trends,

\* Price Forecasting : using historical data, weather patterns, and current market conditions, the application will predict the prices of various crops, helping farmers decide the best time and place to sell.

\* Decision Support :

The application will also suggest strategies for storage, transportation, and sales based on predictive analytics, ensuring that farmers can maximize their income.

3) Project scope

The scope of this project includes the following key components

\* Data collection and integration

- aggregation of historical crop price data, weather data.



- integration with real-time market and weather APIs to update information continuously.

## \* Application Development

- creation of a user-friendly interface for farmers to access market information and forecasts
- mobile application development to ensure accessibility for farmers in remote areas.

## \* Deployment and maintenance.

- deployment of the application on a scalable cloud platform.
- continuous monitoring and updating of the system to adapt to changing market conditions.