

Project: Market Sales Performance Analysis

1. Project Title

Market Sales Performance Dashboard

2. Dashboard Sections

The dashboard will contain the following sections:

A. KPI Cards

- Total Min Price
- Total Max Price
- Total Modal Price
- Total Markets
- Total Commodities
- Average Modal Price
- Latest Modal Price
- Price Difference
- Price Volatility %

B. Price Analysis Section

- Min, Max, Modal Price comparison
- Commodity-wise Avg Modal Price
- Market-wise price comparison
- Grade-wise price patterns

C. Commodity Insights

- Avg Price by Commodity
- Commodity Ranking (using Rank Commodity measure)
- Selected Commodity Price (slicer interactive)

D. Regional Performance

- Sales/Price heatmap by
 - **State**
 - **District**
 - **Market**

E. Trend Section

- Modal Price Trend by Arrival_Date
- Volatility trend over time

F. Filters / Slicers Panel

- Commodity
- State
- District
- Market
- Arrival Date (Calendar Filter)
- Grade
- Variety

3. Data Requirements

The dashboard will use the following columns from the dataset:

Column Name	Description	Used For
State	State where market is located	Filters, Region-wise analysis
District	District name	Region analysis
Market	Market name	KPI (Total Markets), market insights
Commodity	Product/Commodity name	KPI (Total Commodities), ranking, avg price
Variety	Variety within commodity	Filters
Grade	Grading of the product	Price variation
Arrival_Date	Date of price entry	Trends, latest price measure
Min_Price	Minimum price	KPIs, volatility
Max_Price	Maximum price	KPIs, volatility
Modal_Price	Most common market price	Avg price, ranking
Commodity_Code	Commodity ID	Reference

4. Filters / Slicers

The dashboard will have the following slicers:

- State
- District
- Market
- Commodity
- Variety
- Grade
- Arrival Date (Month/Year filter)

5. Visuals / Charts

KPI Cards

- Total Min Price
- Total Max Price
- Total Modal Price
- Average Modal Price
- Total Markets
- Total Commodities

Charts

Visual Type	Purpose	Fields
Clustered Bar Chart	Commodity Avg Modal Price	Commodity, Avg Modal Price

Line Chart	Trend of Modal Price	Arrival_Date, Modal Price
Donut Chart	Commodity Contribution	Commodity, Avg Modal Price
Heatmap	State or District price distribution	Region, Modal Price
Table	Detailed view	Market, Commodity, Price values
Stacked Column Chart	Min, Max, Modal comparison	Commodity, Min/Max/Modal

6. Interactivity

- Drill-down from **State → District → Market**
- Cross-filtering between charts (e.g., selecting a commodity filters all visuals)
- Date range selection affects all KPIs and trends
- Commodity slicer updates:
 - Avg Commodity Price
 - Ranking
 - Selected Commodity Price

7. Calculations / Measures

These DAX measures will be used:

Price & KPI Measures

- Total Min Price

- Total Max Price
- Total Modal Price
- Average Modal Price
- Latest Modal Price
- Price Difference
- Price Volatility %

Commodity/Market Metrics

- Avg Price by Commodity
- Rank Commodity
- Selected Commodity Price
- Selected Market Min Price

Count Metrics

- Total Markets
- Total Commodities

All measures are already prepared by the user in Power BI.

8. Export / Reporting Needs

- Export dashboard to **PDF**
- Export charts to **PNG** for reports
- Export cleaned dataset to CSV
- Repository will include:
 - pbix file
 - screenshots

- Analysis Report (PDF)
- README documentation

9. Notes / Special Instructions

- Dataset does not contain Sales Amount → KPIs are based on Prices only
- No profit calculation is possible
- Commodity_Code is optional and not required for measures
- Arrival_Date must be converted to Date type
- Measures must use correct column names ("Modal_Price", "Min_Price", etc.)
- Dashboard theme should match agricultural/market theme (green/orange colors)