# Senior Data Analyst | Help the Ag Industry

Aim: To understand trends in APMC (Agricultural produce market committee)/mandi price & quantity arrival data for different commodities in Maharashtra.

Objective:

1. Test and filter outliers.
2. Understand price fluctuations accounting the seasonal effect
   1. Detect seasonality type (multiplicative or additive) for each cluster of APMC and commodities
   2. De-seasonalise prices for each commodity and APMC according to the detected seasonality type
3. Compare prices in APMC/Mandi with MSP(Minimum Support Price)- raw and deseasonalised
4. Flag set of APMC/mandis and commodities with highest price fluctuation across different commodities in each relevant season, and year.

Data:  <https://drive.google.com/drive/u/0/folders/0B-zoMsiXW40gZlNtNnlINEszRTg>

Variable description:

* msprice- Minimum Support Price
* arrivals\_in\_qtl- Quantity arrival in market (in quintal)
* min\_price- Minimum price charged per quintal
* max\_price- Maximum price charged per quintal
* modal\_price- Mode (Average) price charged per quintal

Submissions**:**

1. Final cleaned file(s). (🍪 - if the files are shared using GitHub with well versioned log)
2. Documentation around the methodology, analysis, and final results that you want to share with the Government of Maharashtra. Do use graphs and charts to substantiate your analysis. (🍪 -   if you use GitHub pages / RPubs / etc. to share your documentation)
3. Script(s) and their documentation.  (🍪 -  using Jupyter Notebook or GitHub ReadMe.)
4. Visualisations, if any. (🍪 -  using interactive dashboards)

🍪 - Cookie points :)