**Objective**

**Babban Gona is an agricultural firm based in Nigeria. They currently have 20,000 farmers under their umbrella. Their primary source of revenue is selling Maize for wholesale prices to big organizations in the local markets. They would like a predictive model to help decide when is the best time of year to sell their maize at competitive prices.**

**The Problem**

They collect all farmers’ harvests’ as soon as the season starts (Nov/Dec). However, since all farmers are trying to sell their crop at the time, maize prices are at their lowest at that time of the year. Babban Gona has limited storage facilities that they use to store this harvest and sell at a later date. They would like to know the best time of year to sell their crop in order to maximize profits for all the farmers in their cooperative and lift thousands of people out of poverty.

**The Data**

All the data is collected from the FAO (Food and Agriculture Organization) website. Pricing data is monthly, but Production, Yield, Area Harvested etc is only available at an annualized level. Data was downloaded as CSV so it didn’t require much cleaning or wrangling.

**Potential Data Sets**

Ideally, I would have liked Production data at a monthly level as well, but this was not possible. I would have also liked detailed data on import prices, but this is not possible to come by as well. Instead**, I am using Brazil export prices as a proxy for Nigerian import prices, since majority of imported maize is from Brazil.**

**Initial Findings**

1. Nigeria's Food demand for maize peaked in 2012 but has since been declining. World maize demand has seen a steady increase.

2. The Poultry sector accounts for 10-15% of all Maize demand in Nigeria, that demand has stayed strong

3. As a result, Overall Maize demand has experienced a steep decline in recent years.

4. Currency devaluation coupled with high costs of Production have rendered the local Nigerian producers uncompetitive to imports from Brazil and USA