Crop Production

In recent decades, the anatomy of global agriculture has undergone a full transformation and is now structurally disparate. According to the CIA's World Fact book, global agricultural production in 2014 was \$ 4,771 billion. However, only six countries account for 42 percent of total output; China (\$ 1,005 billion) is the largest producer, followed by India (\$ 367 billion).

Agriculture in India in the twenty-first century was structurally different, diverse, strong, and superior to that of the Green Revolution. India's topography, climate, and soil diversity make it a natural multi-product agricultural powerhouse. We produce more crops than any other nation. India has the highest cropping intensity in the world.

Since India is such a large country, it has a diverse range of food and non-food crops that are grown during the five main cropping seasons of rabi, kharif, autumn, summer, and winter.

The following are some of the most popular crops:

- Rice, wheat, millets, maize, and pulses are all food crops.
- Sugar cane, oilseeds, horticulture crops, tea, coffee, rubber, cotton, and jute are all cash crops.

Dataset

The dataset consists of seven attributes that are **state name**, **district name**, **crop year**, **season**, **crop name**, **area**(**hectare**) **and production**(**tonnes**). this data states the season-wise production of the crop in all the states and area associated with each crop.

Visualization

I first extracted the data onto the tableau and reviewed the data. Firstly, I created a sheet between production and area based on the crop year to see the trend in the crop production and area. Secondly, visualize the same based on season and thirdly created a geographical representation on states based on the season, crop they produced, area for the crops and total production.

Dashboard

The dashboard shows the combination of the above visualization and shows the key variation in the chart as we change the season and crop years. A few of the points that can be visualized are as follows:

- We can see the state-wise distribution of Crop and their total production and the area. Different colour represents a different season. From the geography, we can easily identify that the major producer in the season of Rabi and Kharif is Uttar Pradesh. Whereas in the whole year the major producing crop is Coconut and the major producer is Kerala.
- We can easily compare the total production and the area associated with every season. We can say that production (Tonnes) is way high than the area for production (hectare).
- It is clear that the production in India has been continuously growing every year same as the trend line is depicting. Whereas the area for producing crop is decreasing.