Project Title: Agriculture Data Analytics in Crop Yield Estimation using IBM Cognos

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Step-1: Understanding and then uploading the dataset crop_production.csv in IBM Congnos Analytics with Watson Account

In the given data set there are 7 columns i.e State_Name, District_Name, Crop_Year, Season, Crop, Area, Production and 2,46,901 rows. The data set provides the information of various states of india (District-wise) producing various crops with the amount of production and area of cultivation according to seasons (Year-wise).

Step-2: Creating Dashboard in IBM Congnos Analytics with Watson and selcting datasource as crop_production.csv

Step-3: Season with Average Productions chart

- 1. We create a dashboard and rename it as Season with Average Productions.
- 2. We create bar chart and select seasons (from dataset) as bars and Production as Length.
- 3. We know summarize the Production as average.

Step-4: With Years Usage of Area and Production chart

- 1. We create a dashboard and rename it as With Years Usage of Area and Production chart.
- 2. We create area chart and select crop year (from dataset) as x-axis and area as Y-axis.
- 3. We create line chart and select crop year (from dataset) as x-axis and Production as Y-axis.
- 4. We know summarize in both charts area.

Step-5: Top 10 States with Most Area chart

- 1. We create a dashboard and rename it as Top 10 States with Most Area chart.
- 2. We create bar chart and select State name (from dataset) as x-axis and area as Y-axis.
- 3. We know summarize in charts area as average.
- 4. In the State_Name we select top or bottom option and enter 10 to select Top 10 states.

Step-6: State with Crop Production

- 1. We create a dashboard and rename it as State with Crop Production.
- 2. We select Map as a chart and select State name (from dataset) as location.
- 3. In filter we choose crops as option.

Step 7: States with the Crop Production Along With Season (Text Table)

- 1. We create a dashboard and rename it as States with the Crop Production Along With Season.
- 2. We select Table and choose crop and State name as columns.
- 3. We select another Table and choose crop and season as columns.
- 4. We than use crops as filter.

Step-8: Final Dashboard

We create final dashboard having all the graphs and tables we have constructed before.