# Project Report on

# Agriculture Data Analytics In Crop Yield Estimation Using IBM Cognos

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# 1 Introduction:

## 1.1 Overview

Crop production in India is one of the important sources of income and India is one of the top countries to produce crops. This project will be analyzing some important visualization, creating a dashboard and by going through these.

## 1.2 Purpose

All raw data will be converted into useful information through IBM Cognos. This will lead to the most of the insights of Crop production in India.

# 2 LITERATURE SURVEY:

## 2.1 Existing problem

Daily large data has been generated. It is not analysed based on different requirnment with ease of access. So, There must be solution provided by data analysis.

## 2.2 Proposed solution

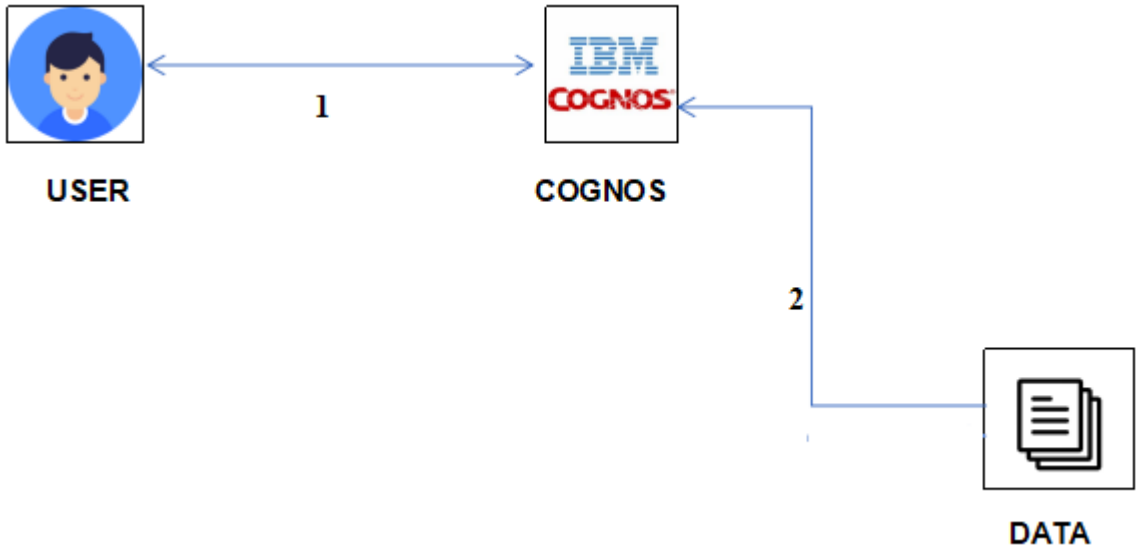
Solution must be in such a way that anybody can visulize the large data as per thier interest.

This solution will provide complete dashboard throgh filter with Crops & different element associated with it like, state, type of crops etc.

Here, IBM Cognos will helpful to create dashboard with various feature avalability.

# 3 THEORITICAL ANALYSIS:

## 3.1 Block diagram




# 4 EXPERIMENTAL INVESTIGATIONS:

During experimental inviestiagation, data found to be clean. It has been adujsted using the Crop production in Indian dataset and plan to create various graphs and charts to highlight the insights and visualizations.

Here, some dataseta are known as

1. State Name - All the Indian State names.

2. District Name -Different District names.

3. Crop Year- contains the crop years.

4. Season – Different seasons for crop production.

5. Area- Total number of areas covered.

6. Production- production of crops.

# 5 FLOWCHART

## 5.1 Seasons With Average Productions

Select Colum visuliazation and Production (Average) to Season is represented

### 5.2 With Years Usage Of Area And Production

Area visulazatioin is selected. Area (Average) to crop Year is represented. Line visulation is selected. Production (Average) to crop Year is represented.

### 5.3 Top 10 States With Most Area

Column visuliazation is selected and Top 10 State with most area are selcted by Top input.

### 5.4 State With Crop Production

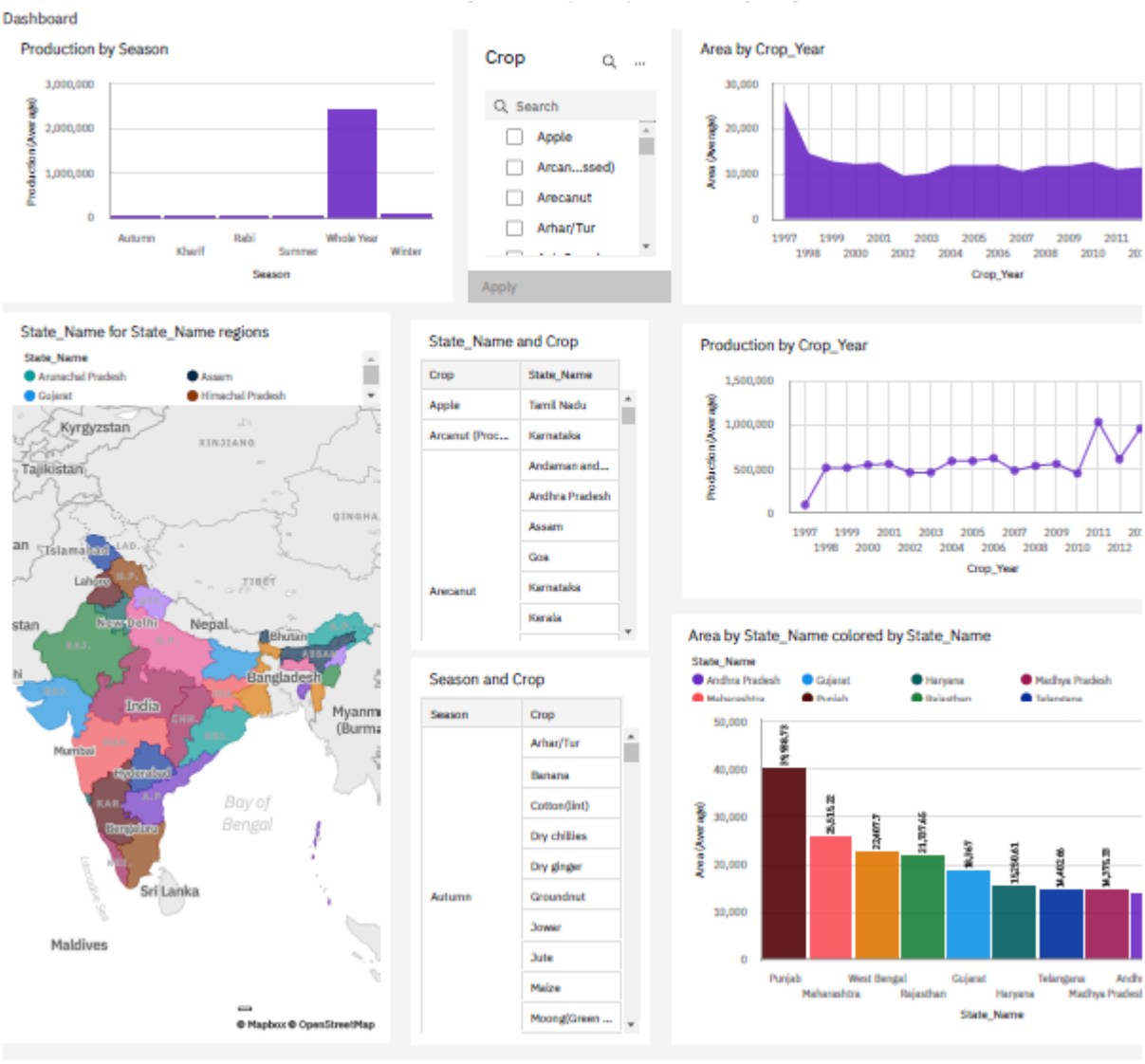
Map visulizatioin is selected. State with crop production are respresented by putting the crop filter.

### 5.5 States With The Crop Production Along With Season (Text Table)

Table visulazation is selected with two table. one is with state with crop production and other is State with season.

# 6 RESULT

Dashboard is presented below.




# 7 ADVANTAGES & DISADVANTAGES

With this dashboard analysis, data visulization is much more easy. As such now, There is no limitation.

# 8 APPLICATIONS

This can apply to all the state govenment agricultural agencies to analyse the crop with season, state, production.

# 9 CONCLUSION

Non data anaylist can understand the complete analysis with some of the filter application in dashboard. It can be updated as data made available to data anaylist.

# 10 FUTURE SCOPE

In future, development can be made throgh inserting districtwise analysis within state.