# Tableau Data viz Challenge 2021

## Domain:HORTICULTURE

# PROJECT REPORT

# 1.INTRODUCTION

## 1.1 Overview

**Horticulture** is an aesthetic science that deals with the important crops which are grown in the gardens e.g. vegetable crops in vegetable garden, fruit crops in fruit orchards. The word Horticulture is derived from two Latin words, Hortus means garden and Culture means knowledge of growing these crops. This project is the data visualization of the domain HORTICULTURE about the Area and Production of the of Fruits and Vegetables in the year 2009-2010 and 2010-2011. Data visualizations are used to discover unknown facts and trends. You can see visualizations in the form of line charts to display change over time. Bar and column charts are useful for observing relationships and making comparisons. A pie chart is a great way to show parts-of-a-whole, and maps are the best way to share geographical data visually.

## 1.2 Purpose

The Tableau Tool is the leading in the area of data visualization and the users from different industries and backgrounds. Visualization of data will helps in better understanding and correct decision-making process in all organizations. By this Tableau Tool, we can easily analyse the data. My project is on the domain Horticulture, with the topic Area and Production of the Fruits and Vegetables in the year 2009-2010 and 2010-2011. This method of data visualisation using Tableau which aims to help farmers or farm managers gain a better understanding of the farming data.By visualisation, this software can help in reducing the work load in the farm data managment process and analysis. Using the visualisations created, farmers can gain a better understanding of the relation between data.

## 2. THEORITICAL ANALYSIS

Data visualizaon gives us a clear idea of what the informaon means by giving it visual context through maps or graphs. This makes the data more natural for the human mind to comprehend and therefore makes it easier to idenfy trends, paerns, and outliers within large data sets.
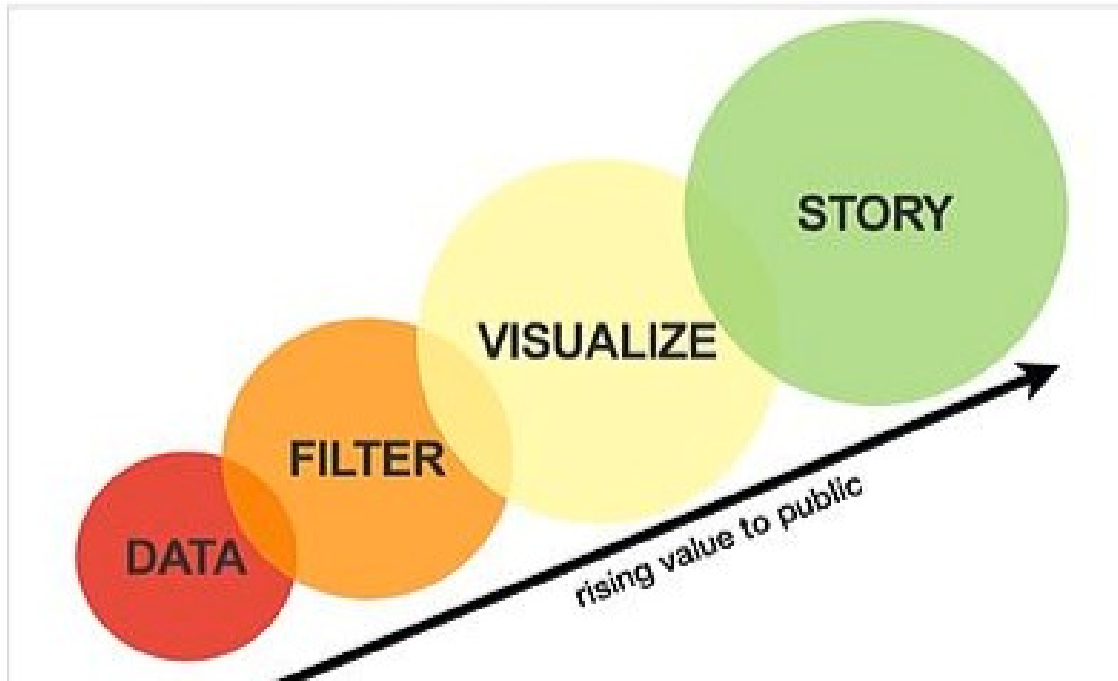


### Software Used

- Tableau Desktop

## Problem Statement

The dataset consists of data refers to data on Area, Production and Productivity of major Fruits and Vegetables producing Countries in the World from 2009-10 to 2010-11 (such as China, India, Brazil, USA, Italy, Spain, Mexico, Indonesia, Philippines, Iran, Turkey and Others).

This are some of the problem solving statements to be solved by the given data to be shown across different countries .

1. Show Fruits productivity (in Tonnes /Hectare) in 2009-10 & 2010-11.

2. Show Vegetables productivity (in Tonnes/Hectare) in 2009-10 &2010-11.

3. Show Fruits Area (in Hectare) in 2009-2010 & 2010-11.

4. Show Vegetables Area (in Hectare) in 2009-10 & 2010-11.

5. Show Fruits Production (in Tonnes) in 2009-2010 & 2010-11.

6. Show Vegetables Production (in Tonnes) in 2009-10 & 2010-11.

7. Show Fruits Area & Production in 2009-10 & 2010-11.

8. Show Vegetables Area & Production in 2009-10 & 2010-11.

9. Show production of fruits and vegetables in 2009-10 & 2010-11.

# 3. RESULT

Tableau visualizes data from the start, allowing you to see the significance right away. Tableau differentiates correlations using color, size, labels and shapes, giving you context as you drill down and explore on a granular level. This application is compared with Microsoft Excel which has the same fuctionality of visualising data.The results are then studied and compared. The Tableau Tool is the leading in the area of data visualization and the users from different industries and backgrounds. Visualization of data will helps in better understanding and correct decision-making process in all organizations. This application can perfectly replicate the function of exsiting visualisations tools, such as Microsoft Excel. Futhermore, this aplication can replace exsisting tools and provide better visualisations.
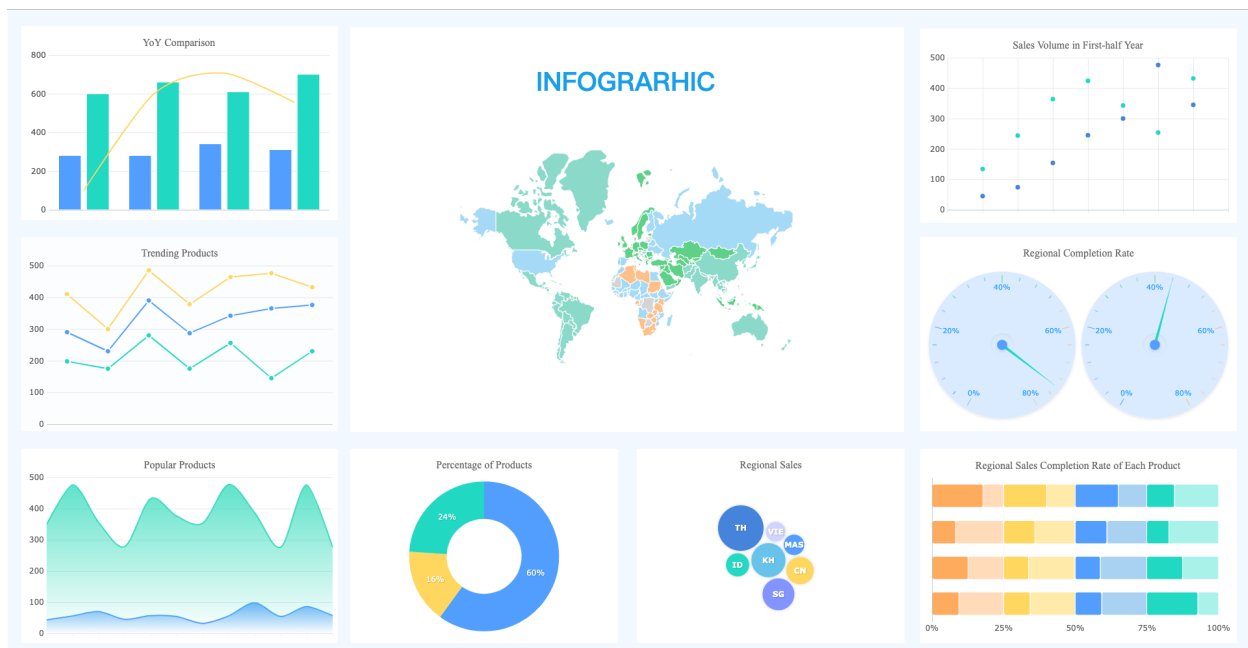
**Dashboards**

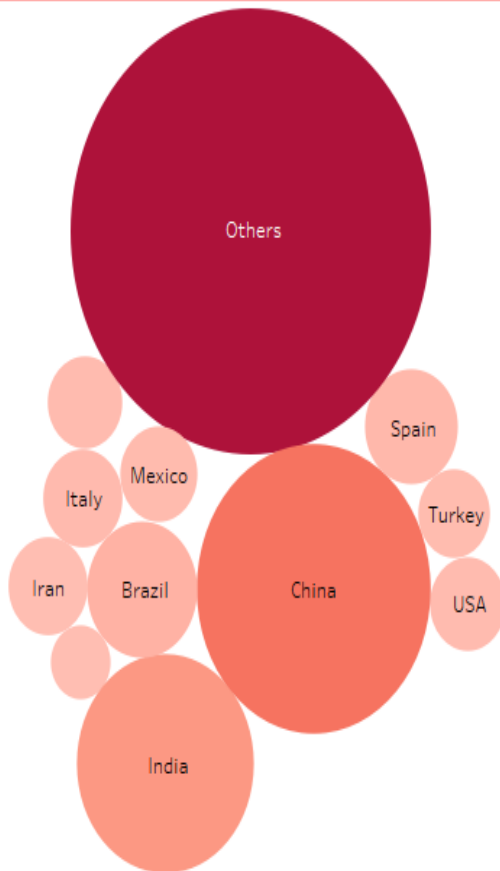Some of the Dashboards created using tableau is shown below:
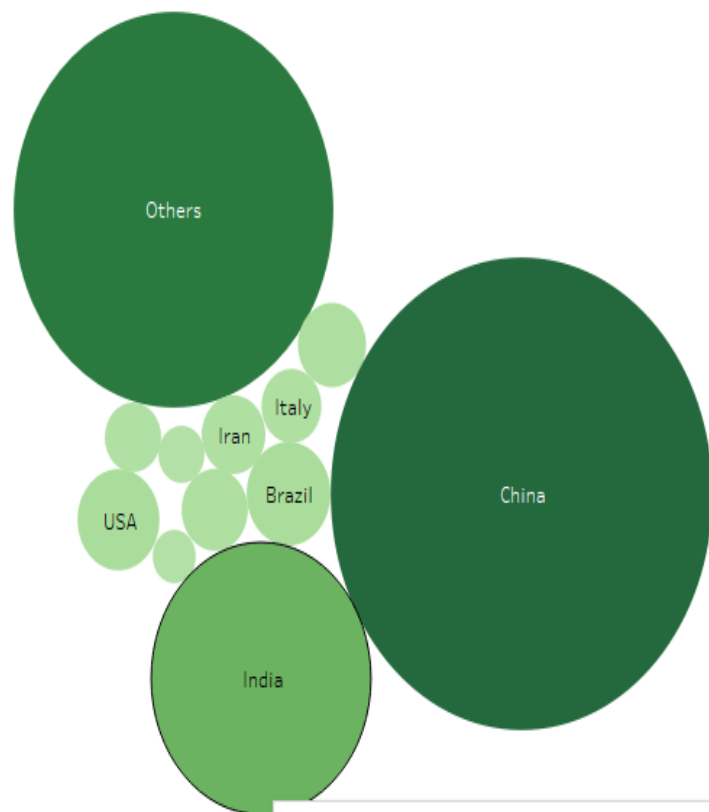
➤ **2009-10 & 2010-11 Vegetables Area & production :**
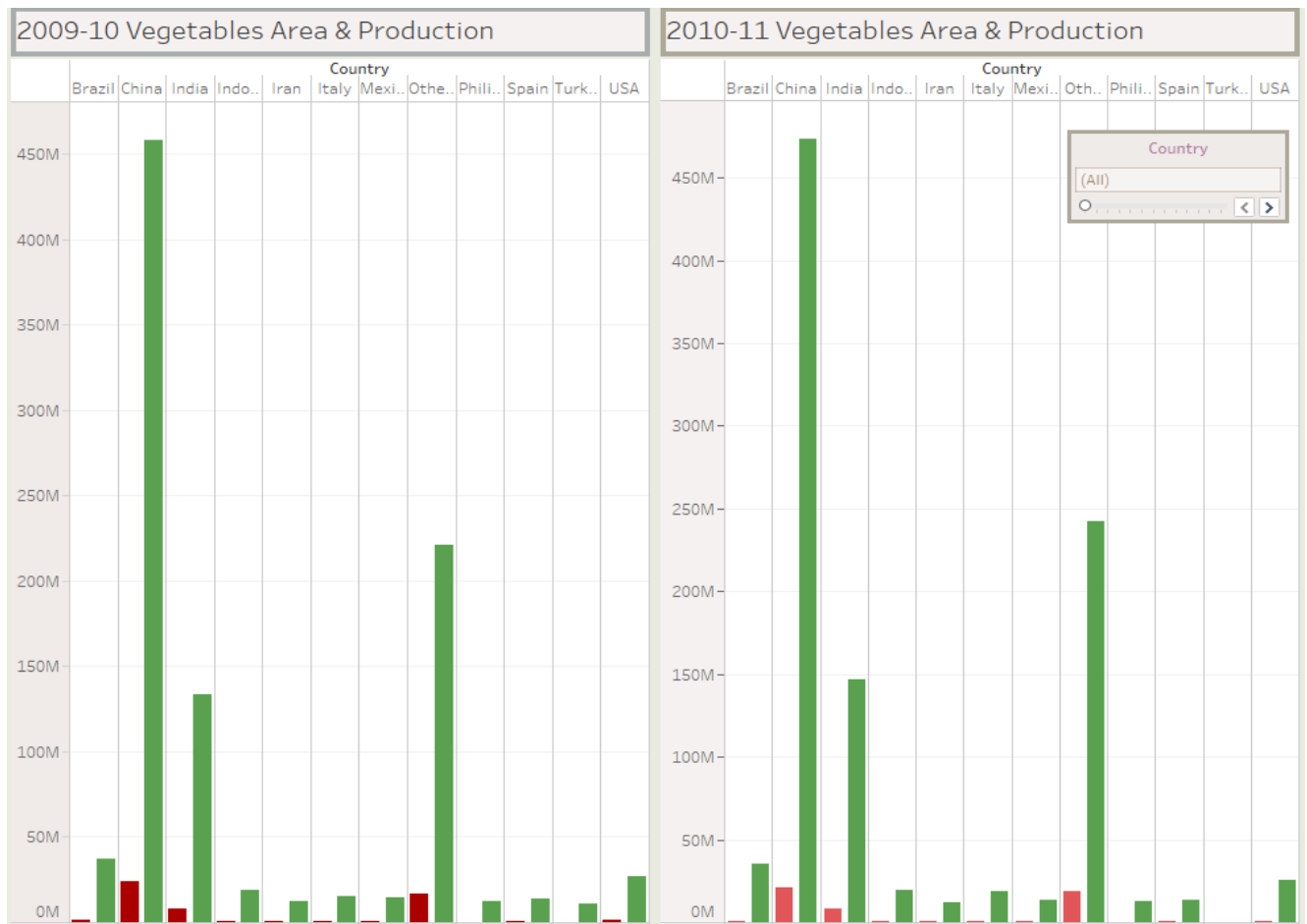
## ➤ Vegetables Area and Fruits Area:

Fruits area is higher in other countries than china and India.Vegetables Area is higher in china and other countries than this.

# 4. Advantages & Disadvantages

**<u>Advantages:</u>**

Better understanding. Easy sharing of information. Accurate analysis. Sales analysis. Finding relation between events.Modificaon of data.Exploring opportunies and trends.

**<u>Disadvantages:</u>**

 It gives estimation not accuracy. Biased. Lack of assistance. Improper design issue. Wrong focused people can skip core messages.

# 5. APPLICATIONS

Some of the applicaons of Data Visualizaon are

1)Banking
2)Insurance
3)Health Care
4)Transportaon
5)Capital Market
6)Government Analysis

# 6. CONCLUSION

The massive amount of farming data requires precise methods and tools to obtain correct analysis results. The method presented in this paper is data visualisaon which aims to help farmers or farm managers gain a beer understanding of farming data. The applicaon developed can perfectly replicate the funcon of exisng visualisaon tools, such as Tableau. By visualisaon, this applicaon can help in reducing the work load in the farm data management process. Using the graph created, farmers can gain a beer understanding of the relaon between data. Farmers can also use graph visualisaon to make a predicon, e.g. fuel consumpon of a tractor for the coming week. This process can help increase the producvity and work quality of farmers. An increase in producvity can ulmately help boost the economy of the country.

# 7.FUTURE SCOPE

Data visualizaon is entering a new era. Emerging sources of intelligence, theorecal developments and advances in muldimensional imaging are reshaping the potenal value that analycs and insights can provide, with visualizaon playing a key role. The principles of effecve data visualizaon won't change. However, next gen technologies and evolving cognive frameworks are opening new horizons, moving data visualizaon from art to science. Many charts these days are starng to get there. In the past we'd have stac charts that were created by the "analycs" guy and he choose to visualize what he/she thought was important. Now, we are starng to see more interacon with filters and such allowing the end user to customize to some degree. In the future, I expect not only filtering but being able to drill down into specific points of interest with lile technical know-how. This brings me to the 2nd point which is the creaon of more tools for people with less technical know-how to create stunning visualizaons. I think Tableau is the leader of this part right now.

# Bibliography

1. www.data.gov.in

2. Tableau Public.