

DATA LITERACY WITH TABLEAU
Indian Agricultural Crop Production Analysis(1997-2021)

A

Project report

Submitted to

Alagappa University, Karaikudi.

Through



Under



Submitted by

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1. INTRODUCTION

1.1 Overview

To analyze captivating realm of India's agricultural cultivation, providing a comprehensive visual exploration of key aspects and trends in the agricultural sector. Through the visual representations, readers can gain valuable insights into crop production, seasonal variations, regional distribution, and overall production trends. These visualizations enable intuitive analysis, allowing stakeholders to uncover patterns, identify areas of growth or concern, and make data-driven decisions.

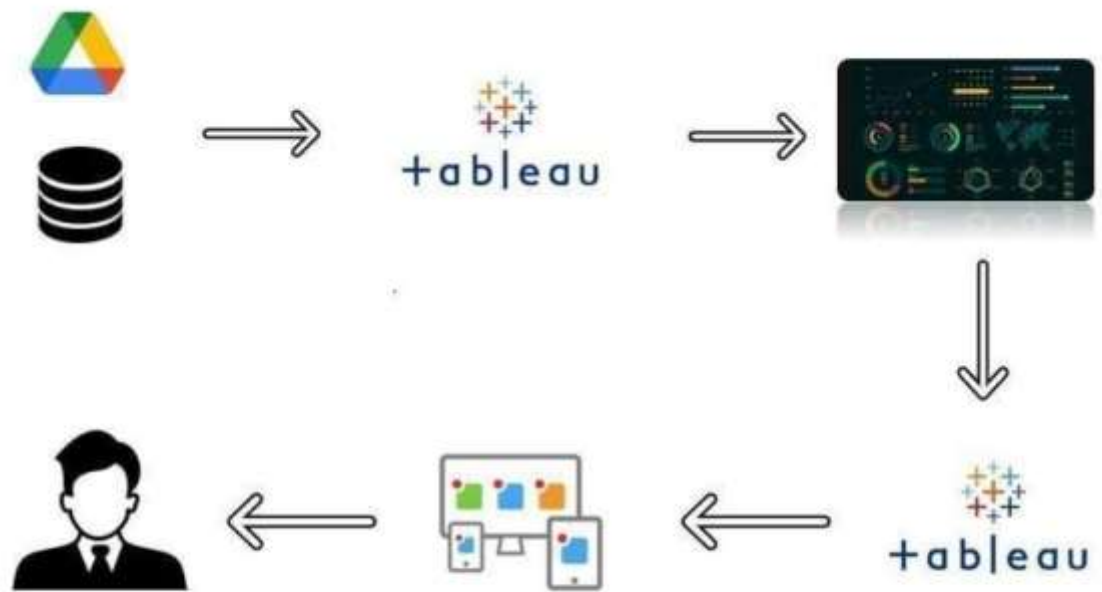
The agriculture sector employs nearly half of the workforce in the country. However, it contributes to 17.5% of the GDP (at current prices in 2015-16).

1.2 Purpose

India's production of food grains has been increasing every year, and India is among the top producers of several crops such as wheat, rice, pulses, sugarcane and cotton. It is the highest producer of milk and second highest producer of fruits and vegetables. In 2013, India contributed 25% to the world's pulses production, the highest for any one country, 22% to the rice production and 13% to the wheat production. It also accounted for about 25% of the total quantity of cotton produced, besides being the second highest exporter of cotton for the past several years.

Agriculture analysis is a very important aspect to crop growing. To increase quality and yields, it is crucial to understand the current nutrient levels of the soil to be able to ascertain which areas require improvement.

Project Architecture

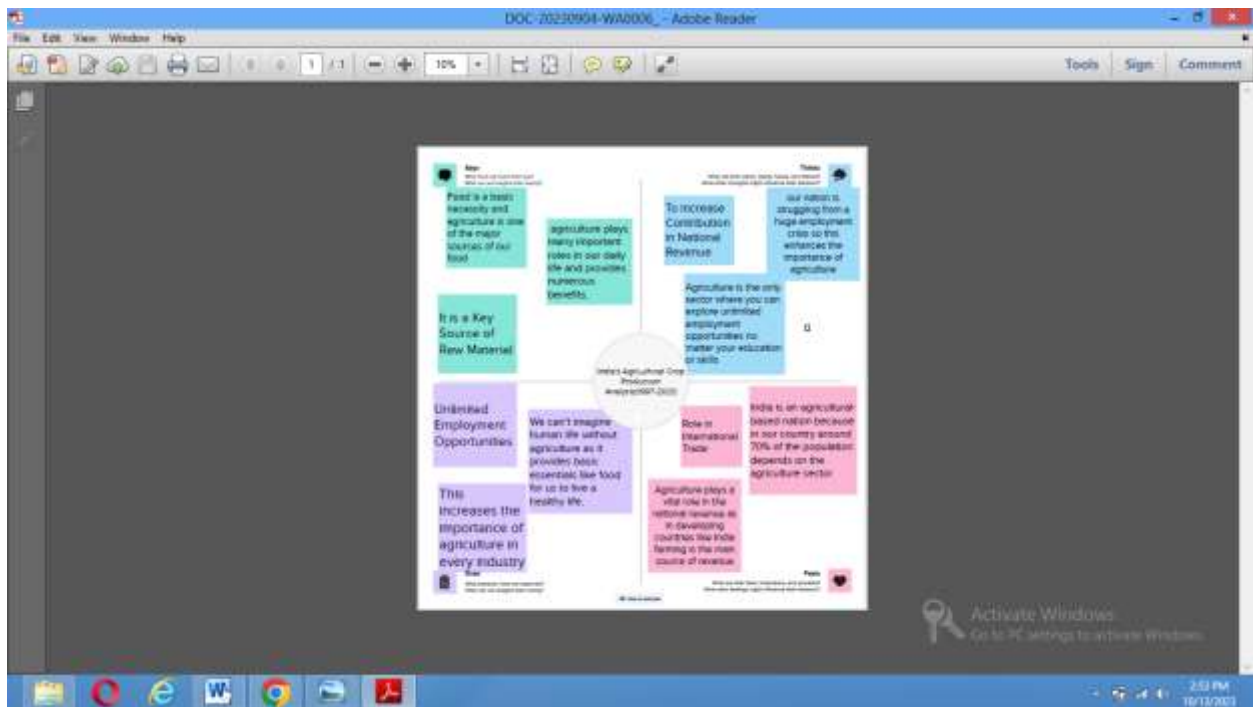


2. Problem Definition & Design Thinking

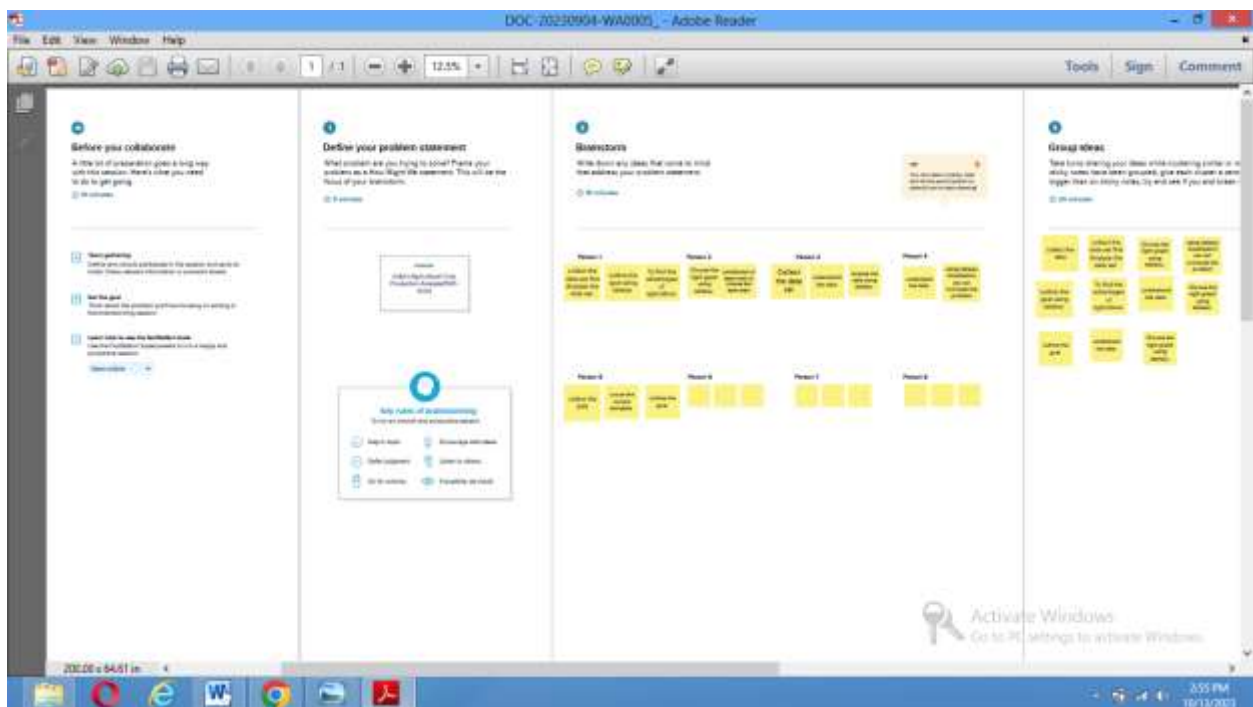
The team members ideas are grouped by Empathy Map and Ideation & Brainstorming Map using app.mural.co

Here we done the following

- Defining the problem
- Problem understanding
- Specification of the business problem



Empathy Map



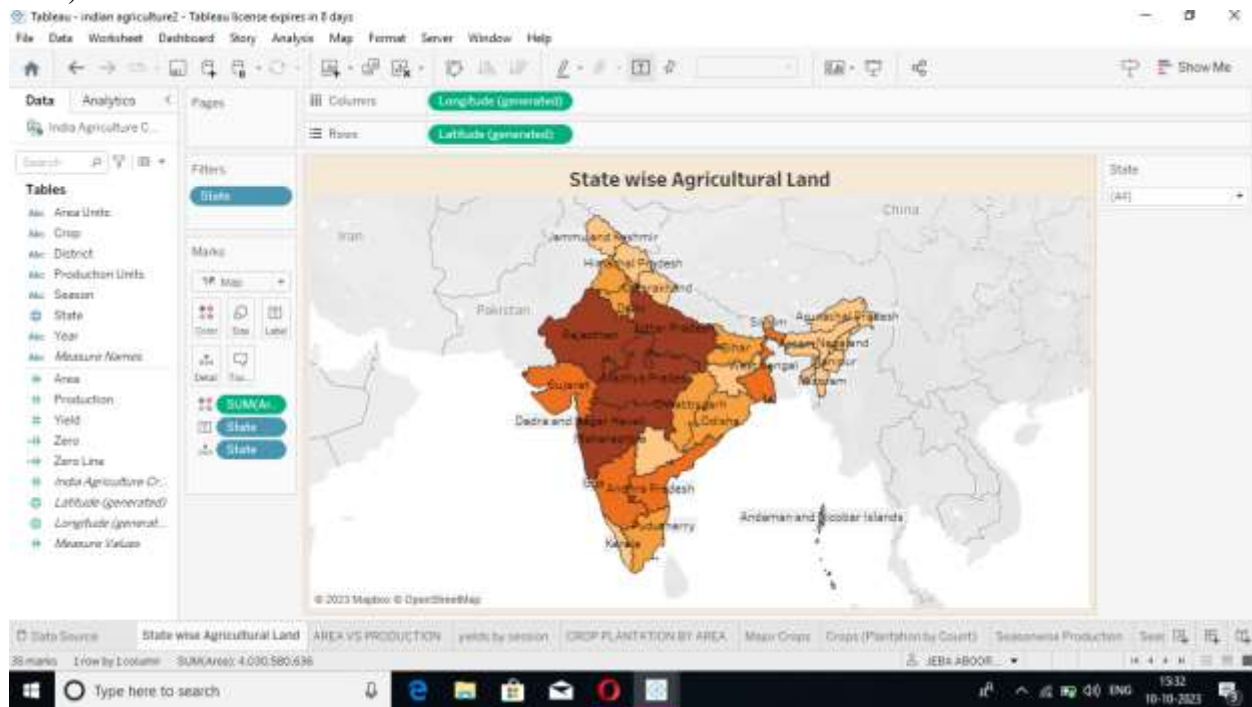
Ideation & Brainstorming Map

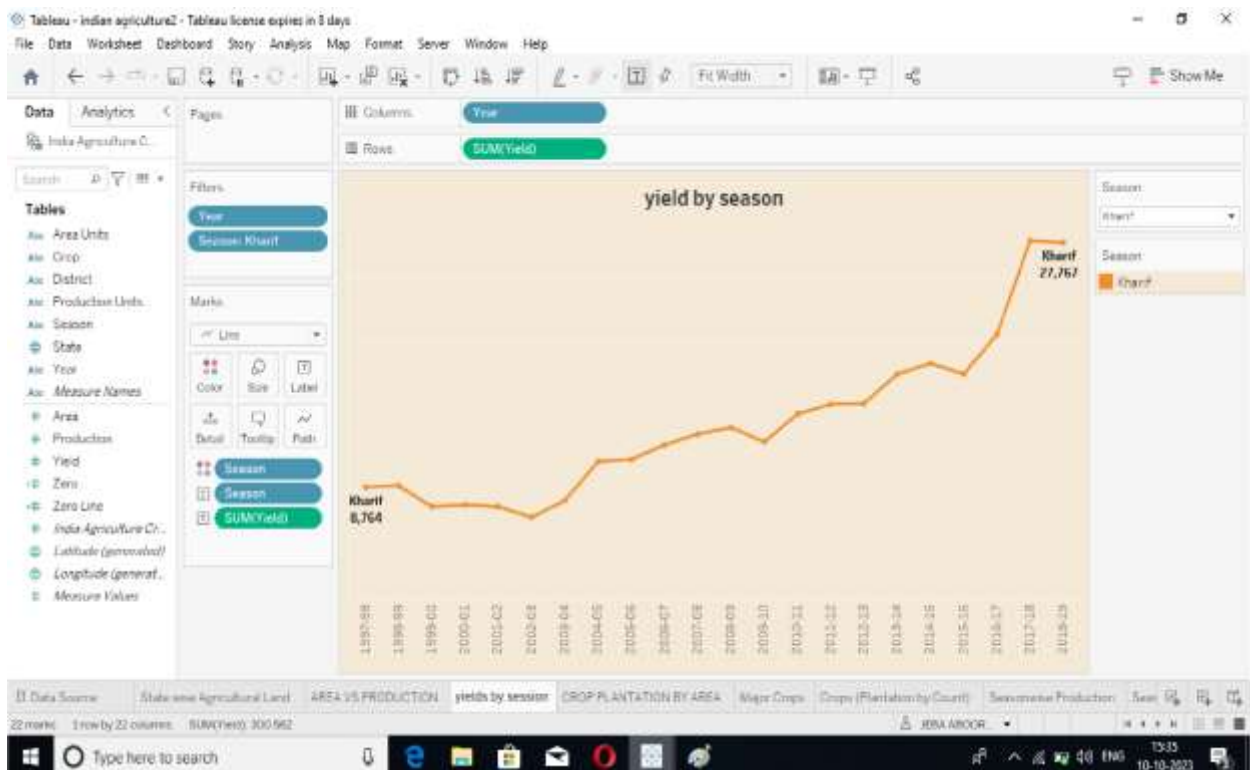
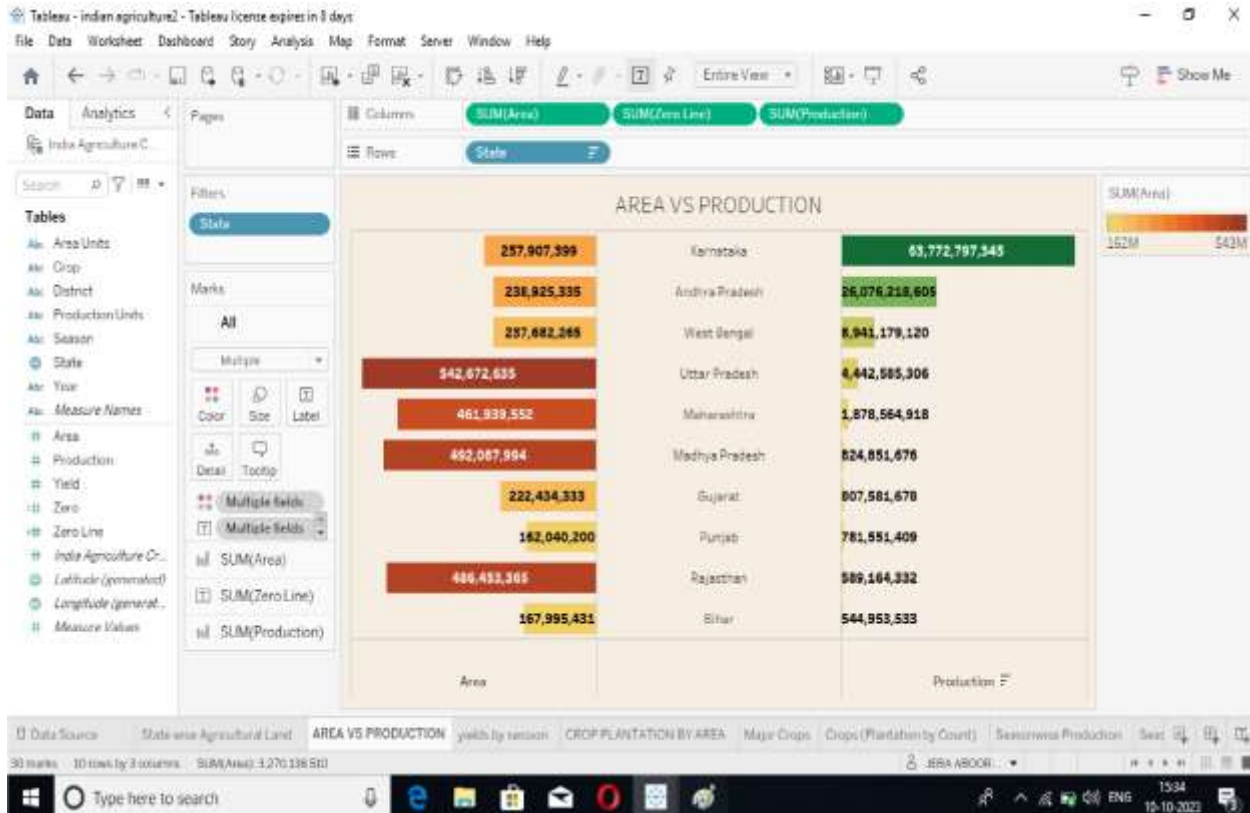
3. RESULT

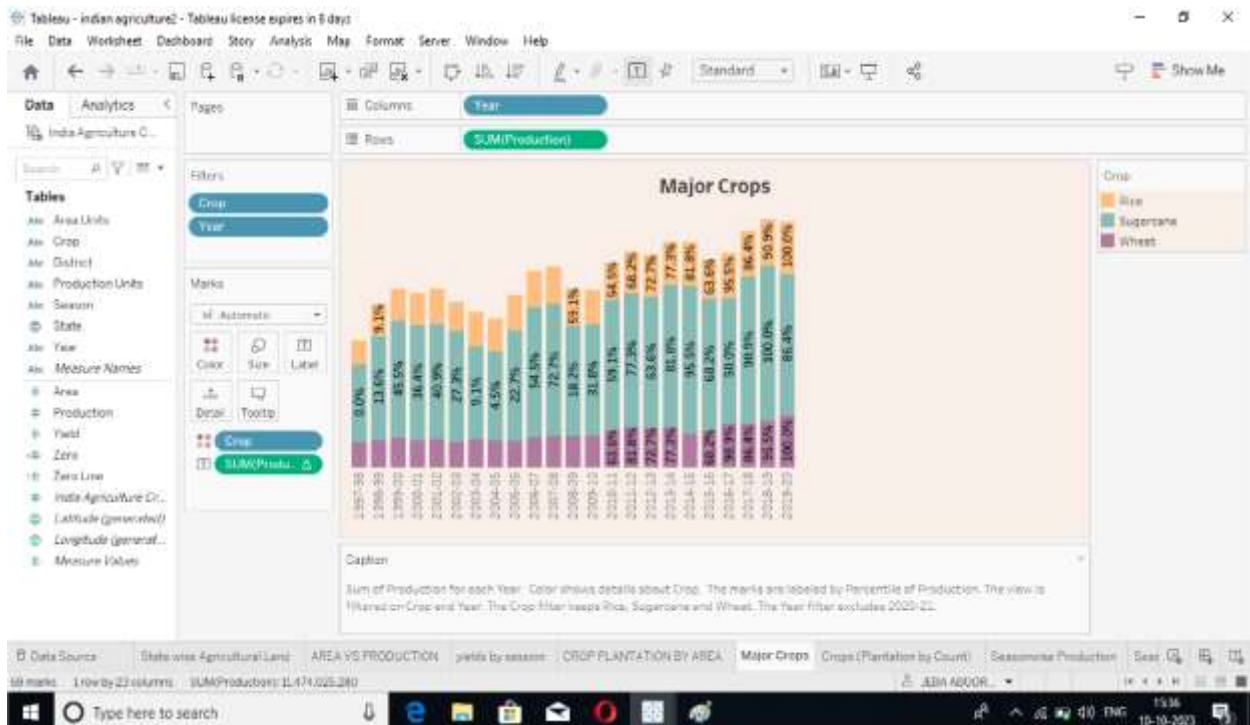
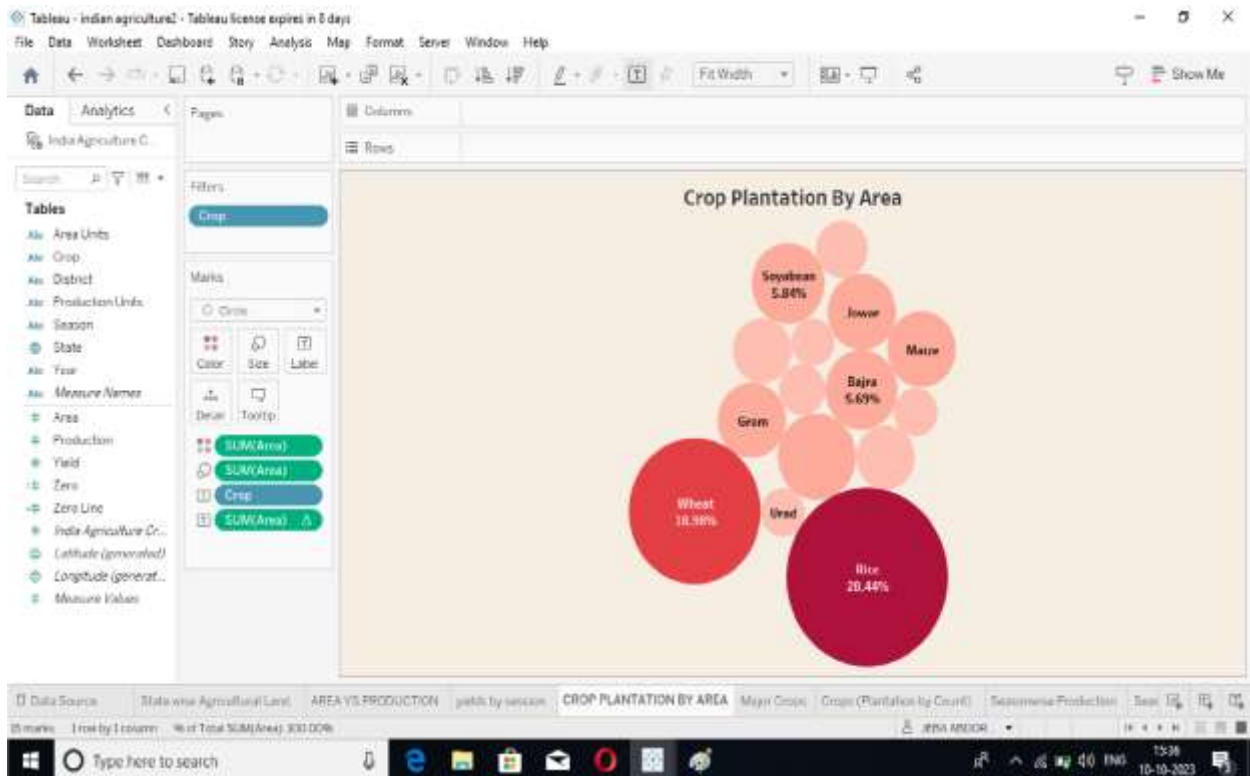
One of the main advantages of Tableau is its easy to use. We don't need to have any coding or programming skills to create stunning and informative dashboards, charts, maps, and stories with Tableau. You can simply drag and drop data sources, fields, filters, and visual elements to customize your views and analysis. Once you have created views on different sheets in Tableau, you can pull them into a dashboard.

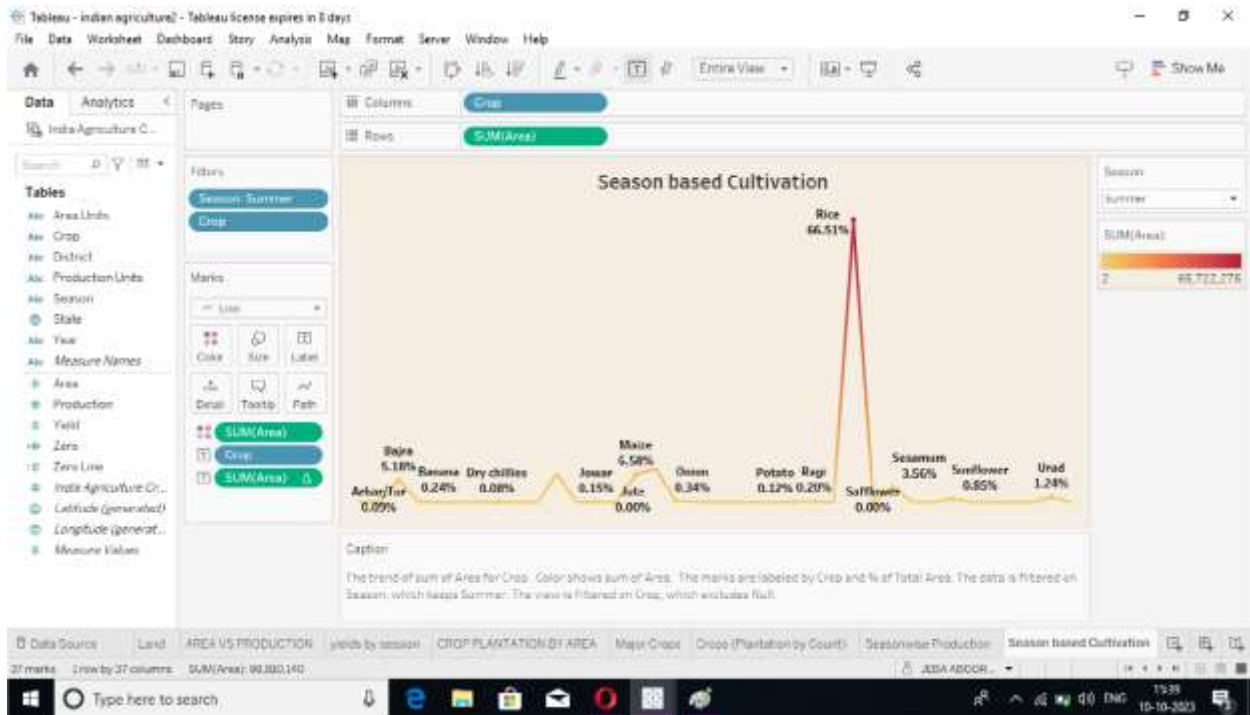
These are screenshots of our project work

D) Screenshots of Sheets

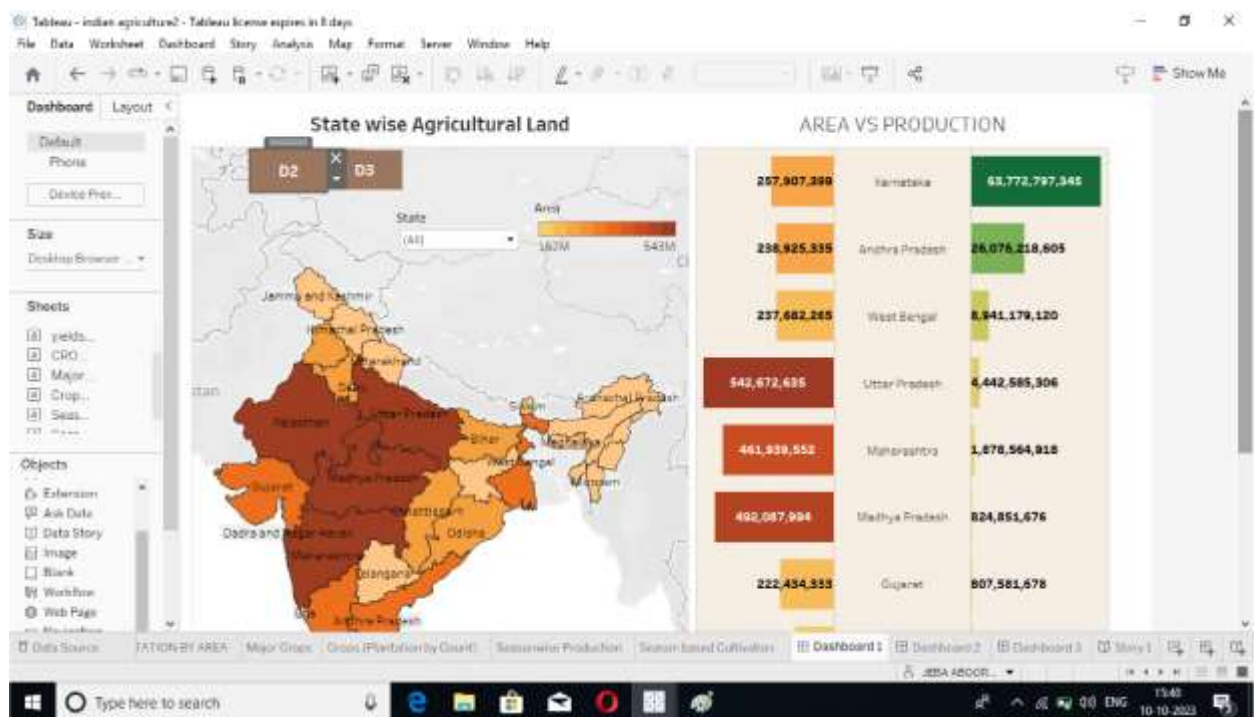


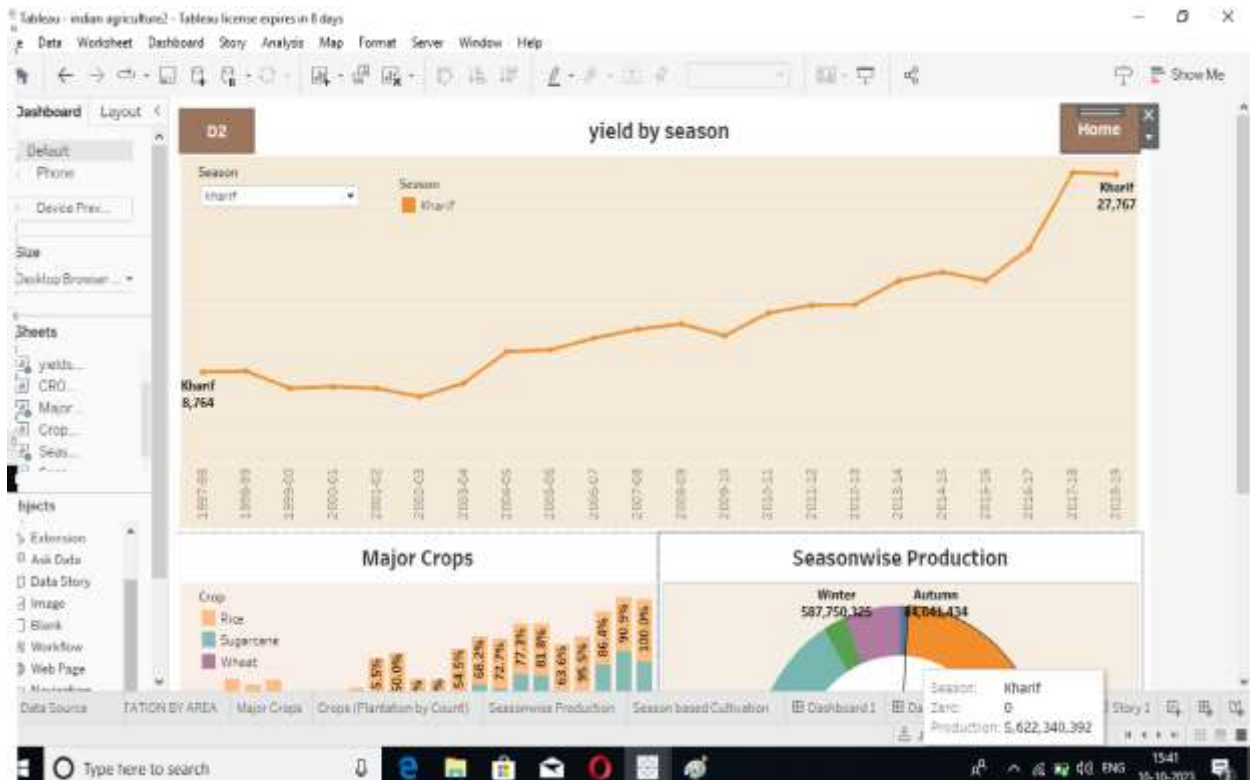
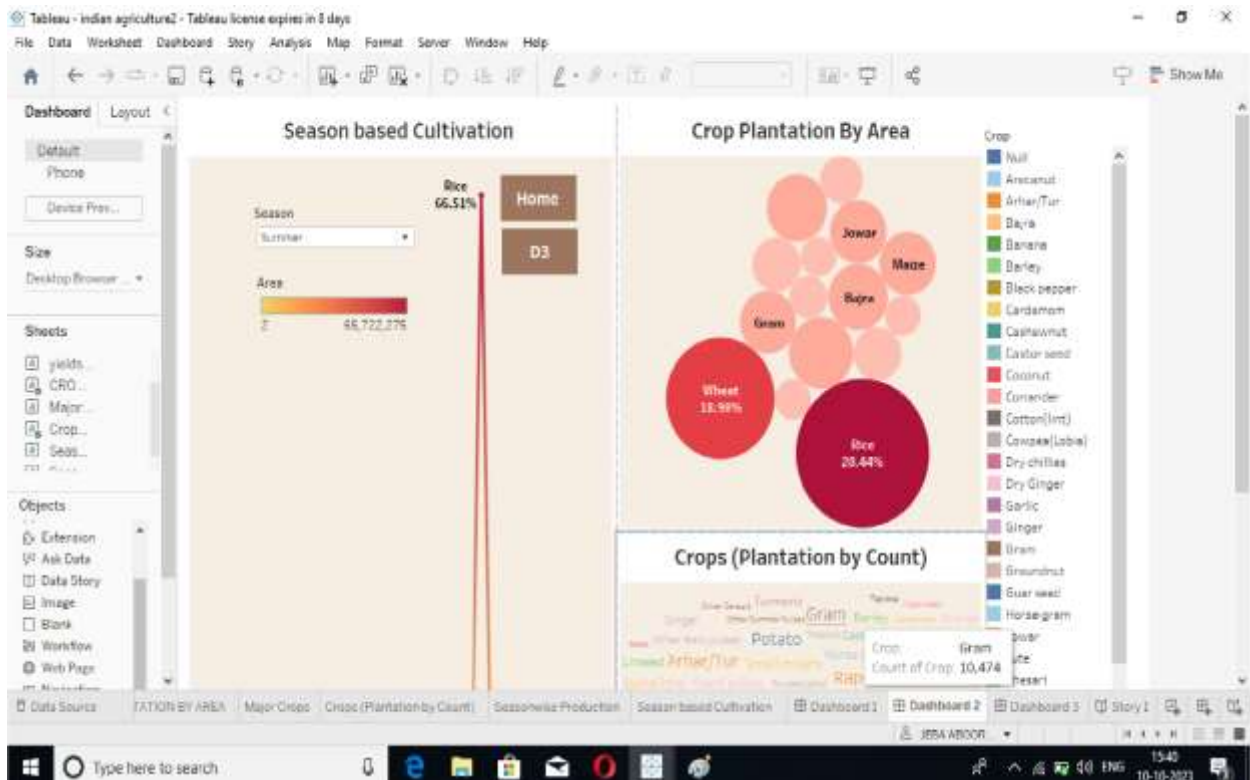




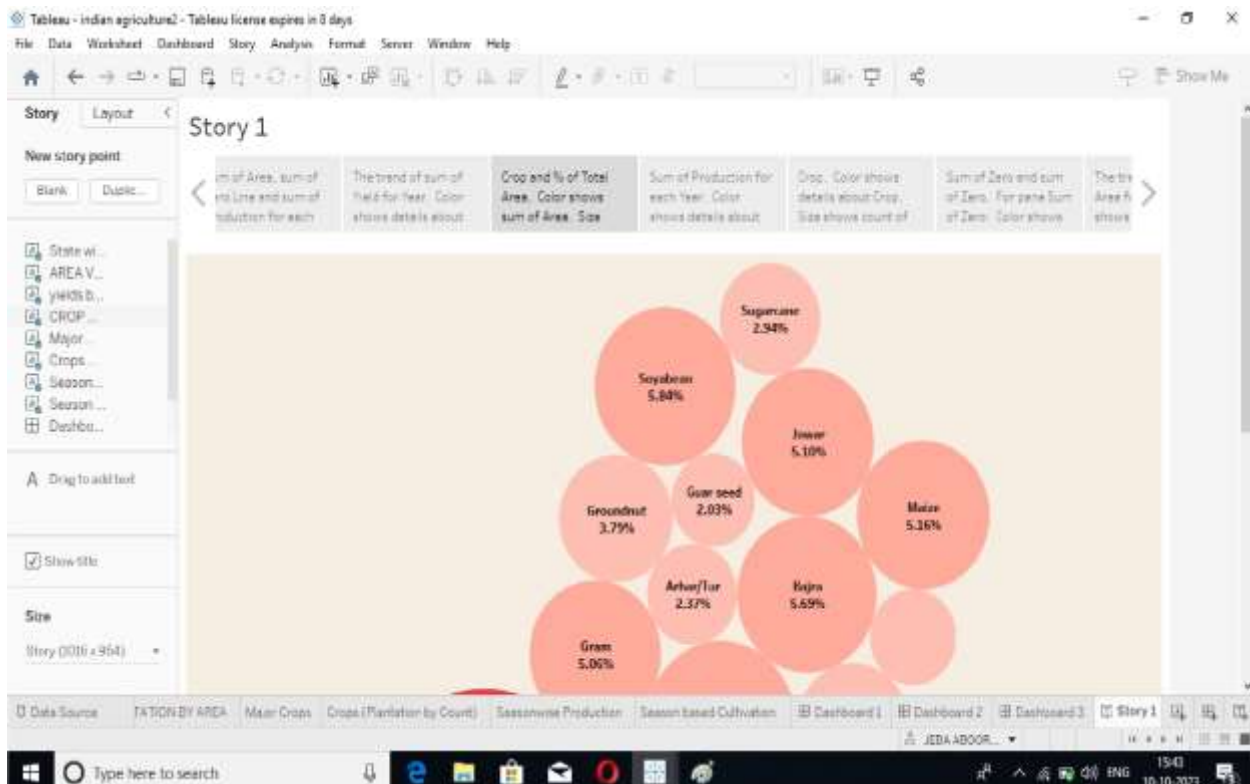
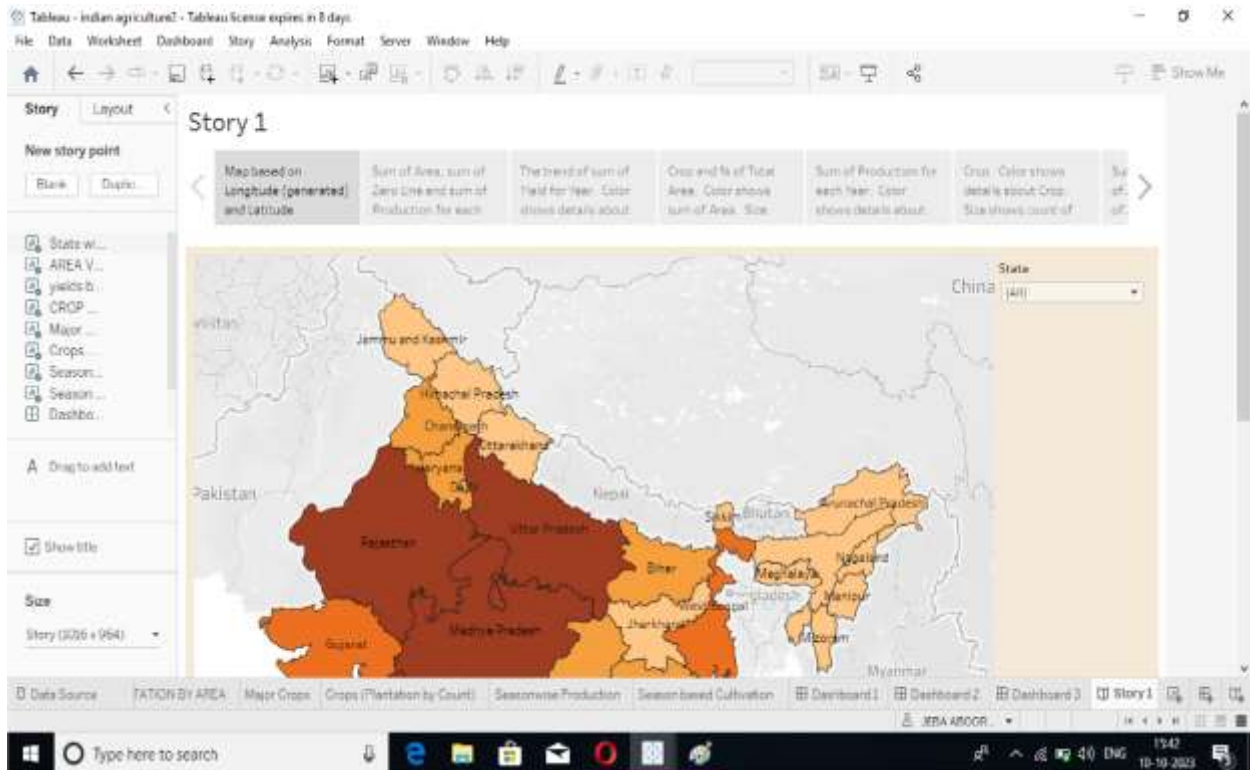


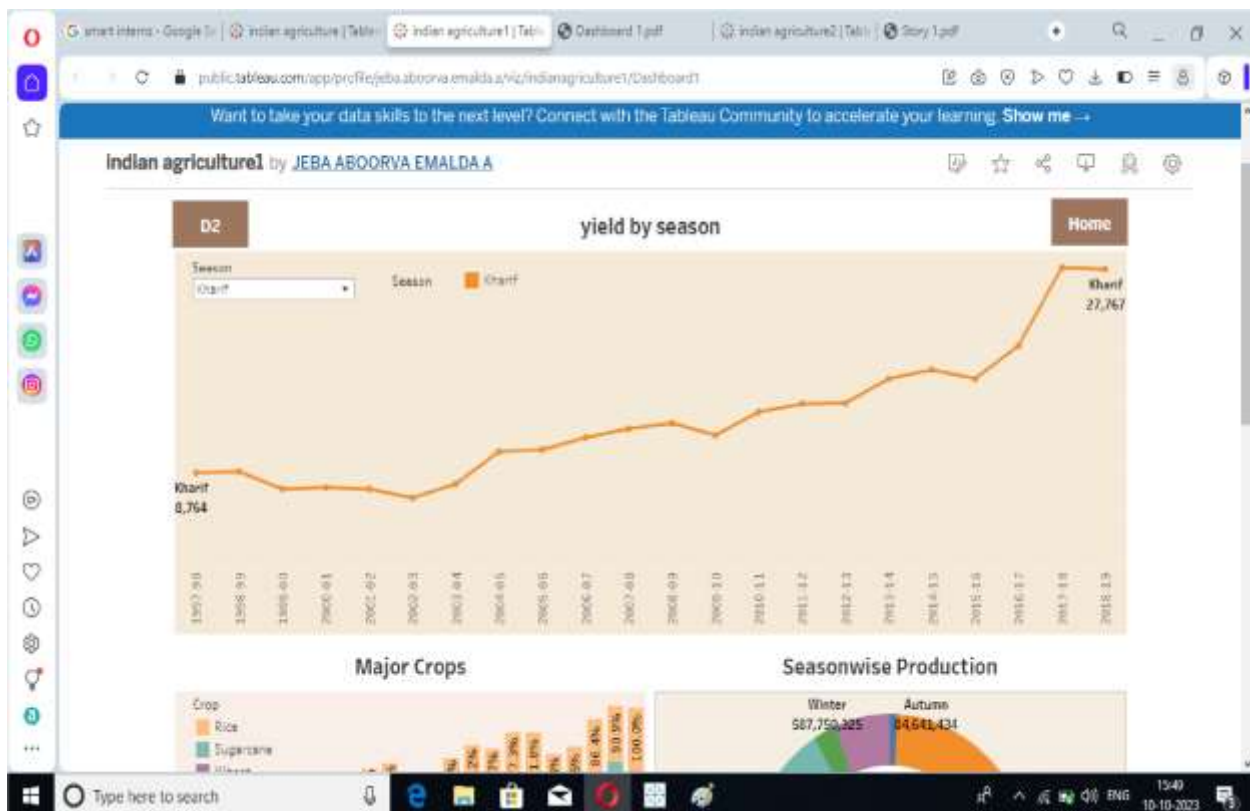
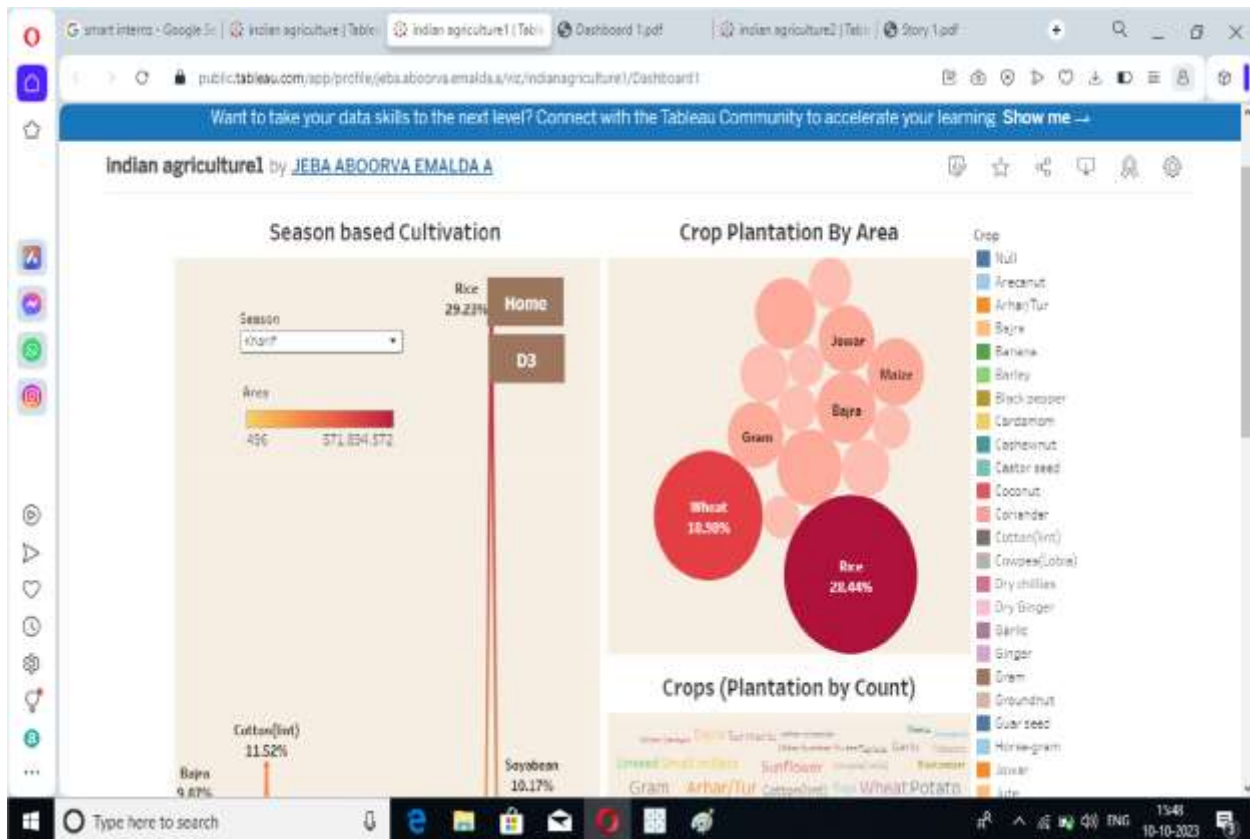
II) Screenshots of Dashboards

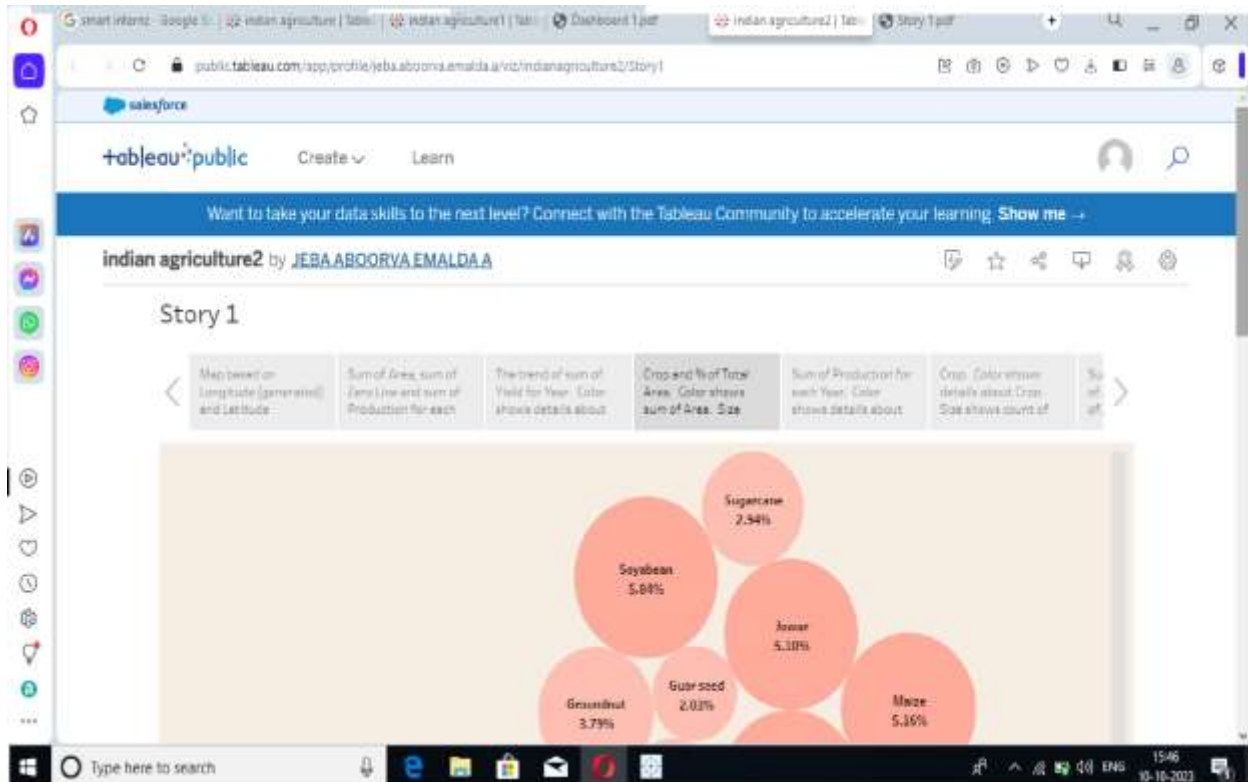




III) Screenshots of Stories







4. ADVANTAGES & DISADVANTAGES

1. This visualization is very easier to analyse the data of Indian Agricultural Crop Production Analysis(1997-2021).
2. To increase crop production, to estimate planting insurance, and improving trade benefits.
3. This web-based agri solution will help farmers to take smart farming decision by resource optimization and smart planning.
4. To identify the Crop Diseases and to take necessary actions.

5. APPLICATIONS

- 1 Mobile-Friendly
- 2.Informative Dashboards
- 3.Advanced Visualization Capabilities
- 4.Availability of Maps. And so on.

6. CONCLUSION

India's production of food grains has been increasing every year, and India is among the top producers of several crops such as wheat, rice, pulses, sugarcane and cotton. It is the highest producer of milk and second highest producer of fruits and vegetables. In 2013, India contributed 25% to the world's pulses production, the highest for any one country, 22% to the rice production and 13% to the wheat production. It also accounted for about 25% of the total quantity of cotton produced, besides being the second highest exporter of cotton for the past several years.