PROJECT REPORT

1. INTRODUCTION

1.1 Overview: -

The primary business requirements for this report are to visualize and Analyze business expenses, provide industry-specific insights, identify Cost drivers, highlight outliers, and offer interactive functionality. Stakeholders need a visual representation of expenses to compare and Analyze spending patterns across different businesses and industries. The report should facilitate the identification of key cost drivers, Enabling stakeholders to understand the primary factors contributing to Expenses. Additionally, it should flag any outliers or anomalies for Further investigation. The report should provide a user-friendly and Intuitive experience that empowers stakeholders to make data-driven Decisions and drive positive change in the agricultural sector.

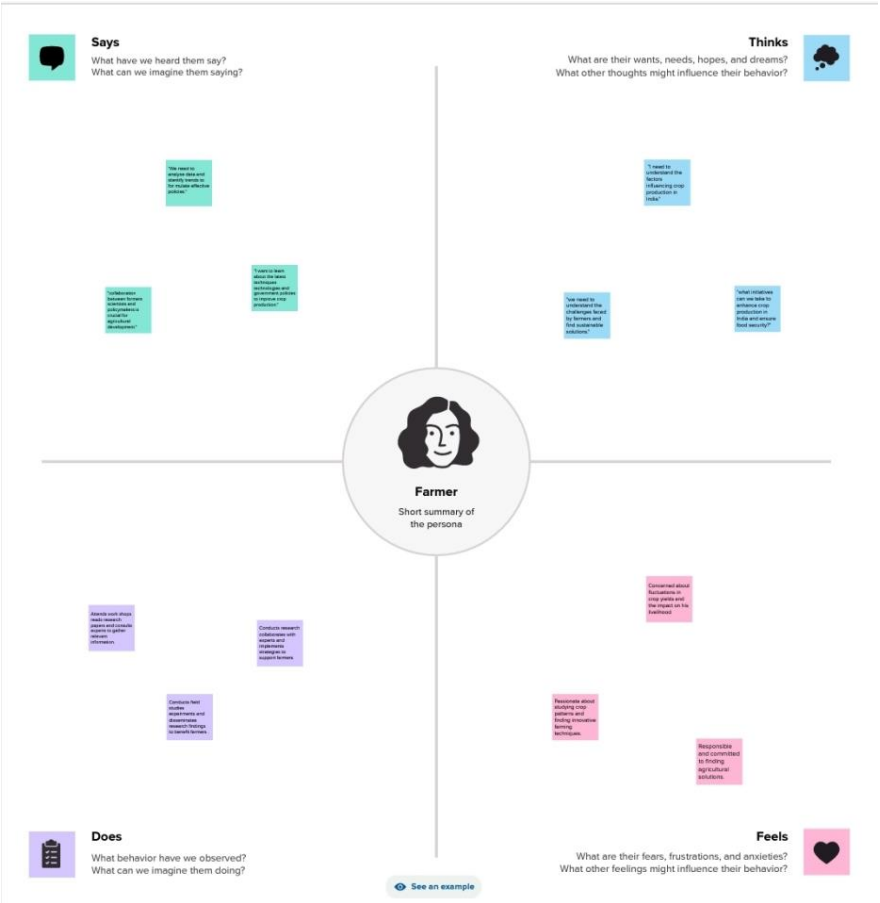
1.2 Purpose: -

Social Impact: On the social front, agriculture serves as a vital source of Livelihood for a large portion of the population, especially in rural areas. It plays a crucial role in ensuring food security and alleviating poverty by Providing employment opportunities and income generation. Moreover, Agricultural activities contribute to the overall socio-economic Development of rural communities, fostering social cohesion and Preserving cultural traditions.

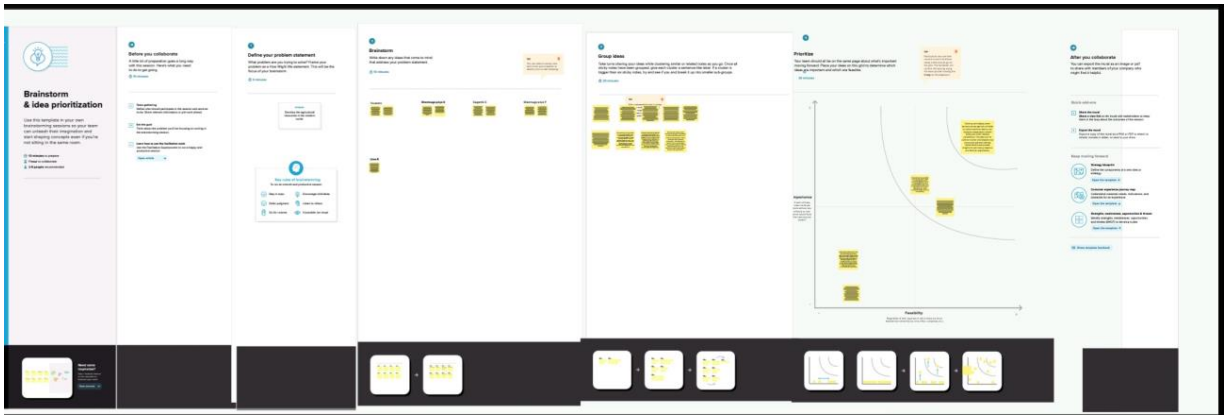
Business Impact: From a business perspective, the agricultural sector Plays a pivotal role in India's economy. It contributes to the country's GDP and serves as a source of raw materials for various industries, such As food processing, textile, and pharmaceuticals. The growth and Productivity of the agricultural sector have direct implications for the Overall economic performance and stability of the nation. Furthermore, Advancements in agricultural practices and technology have the Potential to enhance productivity, optimize resource utilization, and Promote sustainable practices. This, in turn, can lead to increased Profitability and competitiveness for agricultural businesses.

2. PROBLEM DEFINITION & DESIGN THINKING

2.1 Empathy Map: -

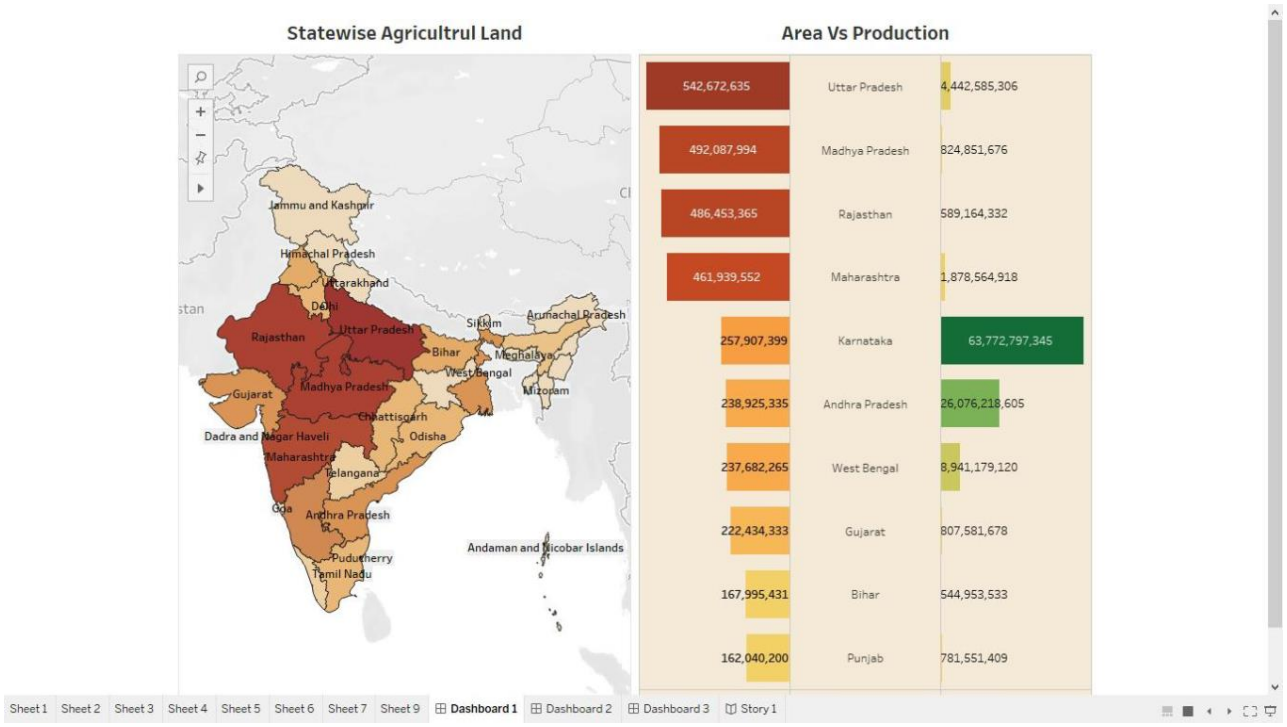


2.2 Ideation & Brainstorming Map: -

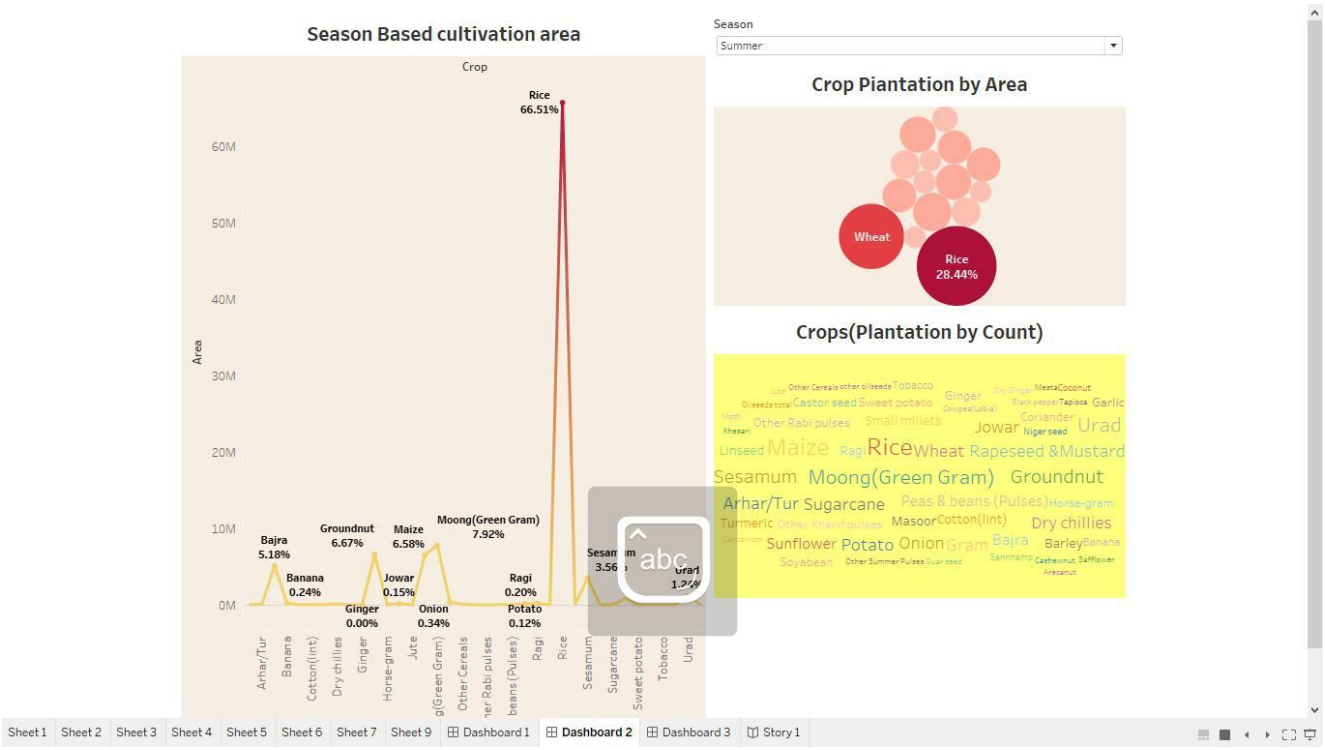


3. RESULT

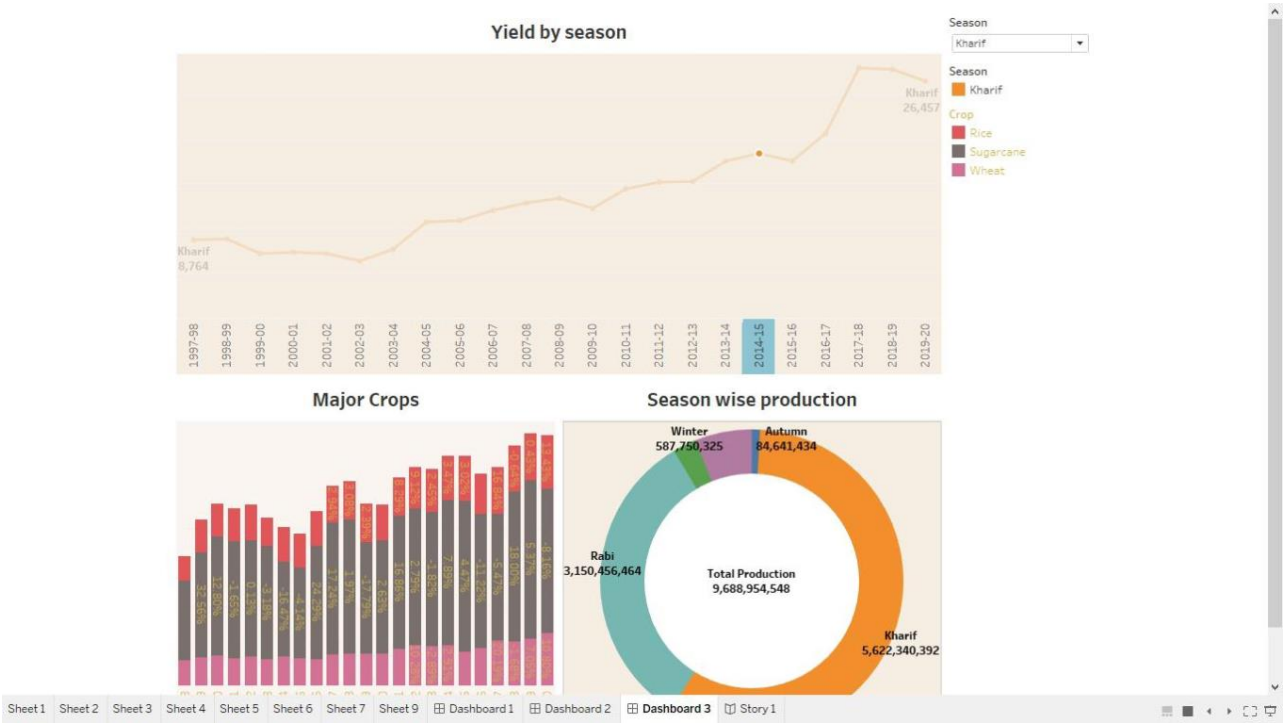
Dashboard 1



Dashboard 2


Season Based cultivation area
Crop
Area
Rice 66.51%
Bajra 5.18%
Banana 0.24%
Groundnut 6.67%
Ginger 0.00%
Maize 6.58%
Jowar 0.15%
Moong(Green Gram) 7.92%
Onion 0.34%
Ragi 0.20%
Potato 0.12%
Season
Summer
Crop Piantation by Area
Wheat
Rice 28.44%
Crops(Plantation by Count)
Maize
Rice
Wheat
Sesamum
Moong(Green Gram)
Groundnut
Arhar/Tur
Sugarcane
Cotton(lint)
Dry chillies
Sunflower
Potato
Onion
Gram
Jowar
Urad
Sheet 1
Sheet 2
Sheet 3
Sheet 4
Sheet 5
Sheet 6
Sheet 7
Sheet 9
Dashboard 1
Dashboard 2
Dashboard 3
Story 1

Dashboard 3


Yield by season
Season
Kharif
Crop
Rice
Sugarcane
Wheat
Kharif 26,457
Kharif 8,764
Major Crops
Season wise production
Winter 587,750,325
Autumn 84,641,434
Rabi 3,150,456,464
Total Production 9,688,954,548
Kharif 5,622,340,392
Sheet 1
Sheet 2
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Sheet 4
Sheet 5
Sheet 6
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Sheet 9
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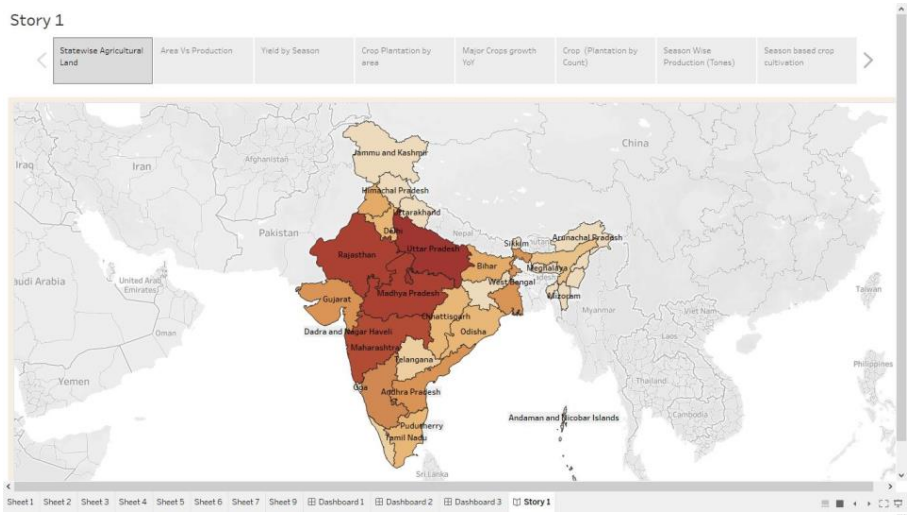
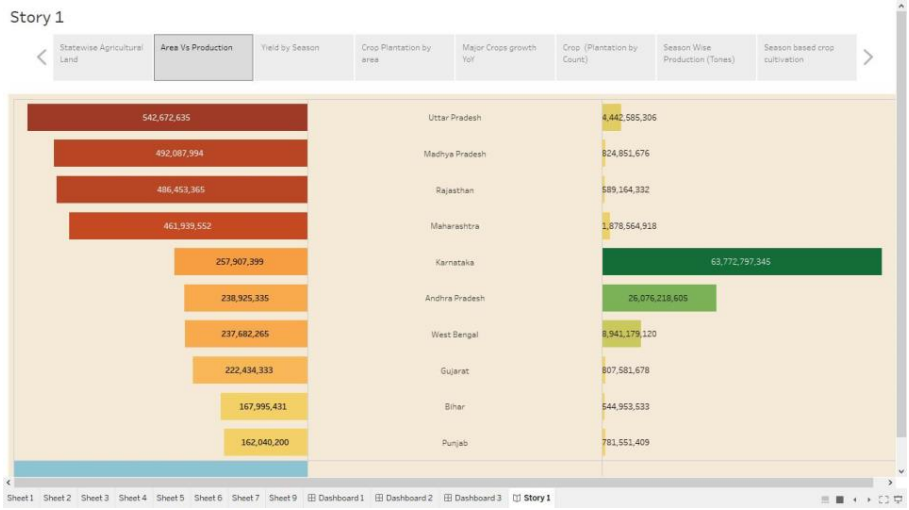
Story 1

Story


Story 1
Statewise Agricultural Land
Area Vs Production
Yield by Season
Crop Plantation by area
Major Crops growth YoY
Crop (Plantation by Count)
Season Wise Production (Tones)
Season based crop cultivation
Jammu and Kashmir
Himachal Pradesh
Uttarakhand
Delhi
Uttar Pradesh
Rajasthan
Bihar
Sikkim
Arunachal Pradesh
Meghalaya
West Bengal
Mizoram
Gujarat
Madhya Pradesh
Chhattisgarh
Odisha
Dadra and Nagar Haveli
Maharashtra
Telangana
Goa
Andhra Pradesh
Puducherry
Tamil Nadu
Andaman and Nicobar Islands
China
Iran
Iraq
Afghanistan
Pakistan
Nepal
Bhutan
Myanmar
Laos
Thailand
Cambodia
Viet Nam
Taiwan
Philippines
Yemen
Oman
United Arab Emirates
Sri Lanka
Sheet 1 Sheet 2 Sheet 3 Sheet 4 Sheet 5 Sheet 6 Sheet 7 Sheet 9 Dashboard 1 Dashboard 2 Dashboard 3 Story 1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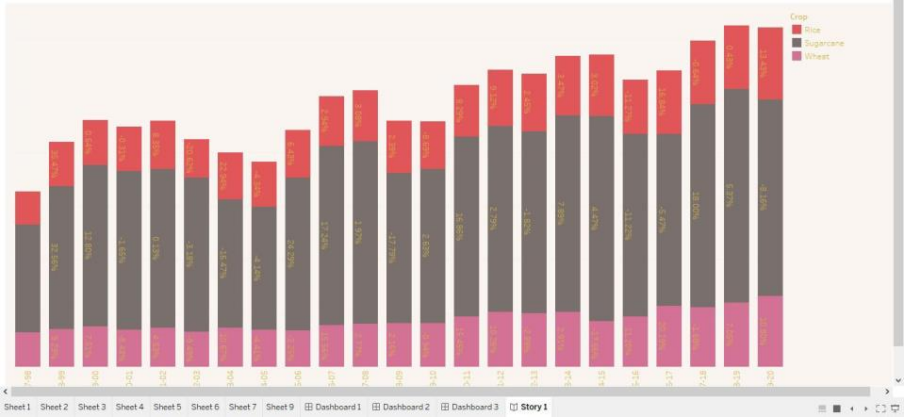
Area Vs Production
Yield by Season
Crop Plantation by area
Major Crops growth YoY
Crop (Plantation by Count)
Season Wise Production (Tones)
Season based crop cultivation
542,672,635
Uttar Pradesh
4,442,585,306
492,087,994
Madhya Pradesh
824,851,676
486,453,365
Rajasthan
589,164,332
461,939,552
Maharashtra
1,878,564,918
257,907,399
Karnataka
63,772,797,345
238,925,335
Andhra Pradesh
26,076,218,605
237,682,265
West Bengal
8,941,179,120
222,434,333
Gujarat
807,581,678
167,995,431
Bihar
544,953,533
162,040,200
Punjab
781,551,409
Sheet 1 Sheet 2 Sheet 3 Sheet 4 Sheet 5 Sheet 6 Sheet 7 Sheet 9 Dashboard 1 Dashboard 2 Dashboard 3 Story 1


Story 1
Statewise Agricultural Land
Area Vs Production
Yield by Season
Crop Plantation by area
Major Crops growth YoY
Crop (Plantation by Count)
Season Wise Production (Tones)
Season based crop cultivation
Sugarcane 2.94%
Soyabean 5.84%
Jowar 5.10%
Maize 5.16%
Groundnut 3.79%
Arhar/Tur
Bajra 5.69%
Gram 5.06%
Cotton(lint) 6.63%
Rapeseed &Mustard
Wheat 18.98%
Urad
Rice 28.44%
Sheet 1 Sheet 2 Sheet 3 Sheet 4 Sheet 5 Sheet 6 Sheet 7 Sheet 9 Dashboard 1 Dashboard 2 Dashboard 3 Story 1

Story 1

Statewise Agricultural Land | Area Vs Production | Yield by Season | Crop Plantation by area | Major Crops growth YoY | Crop (Plantation by Count) | Season Wise Production (Tones) | Season based crop cultivation



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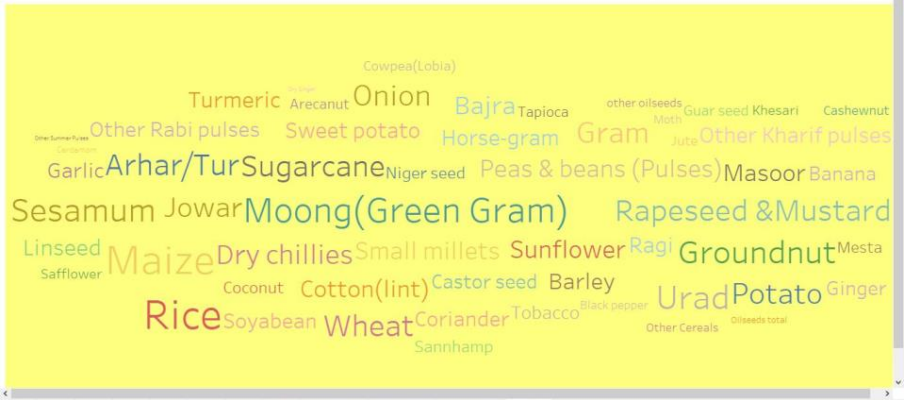

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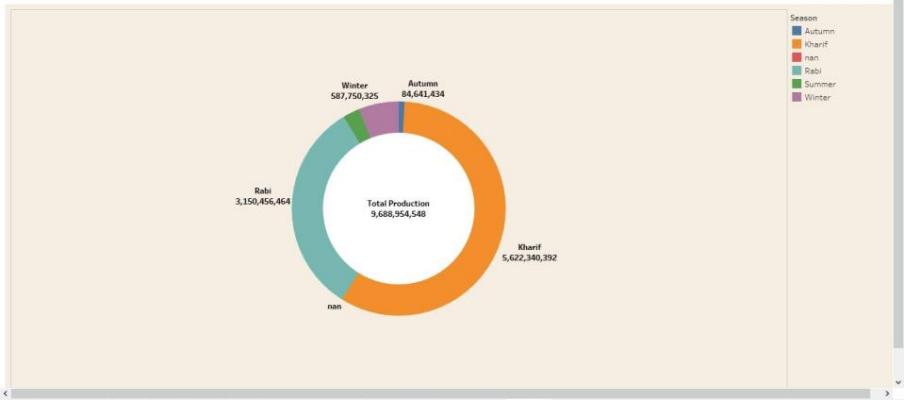

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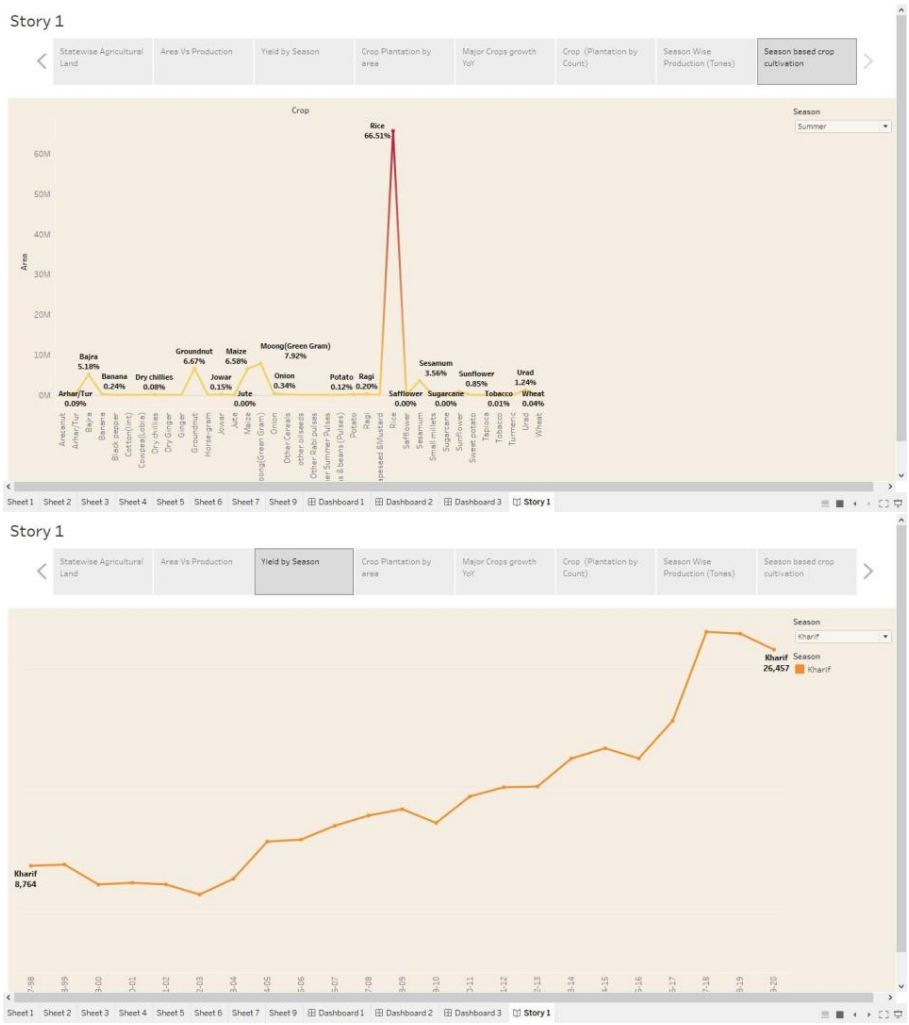

4. ADVANTAGES & DISADVANTAGES

- The India's Agricultural Crop Production Analysis(1997-2021) project is a comprehensive visual exploration of key aspects and trends in the agricultural sector of India. The project provides valuable insights into crop production, seasonal variations, regional distribution, and overall production trends. The visualizations enable intuitive analysis, allowing stakeholders to uncover patterns, identify areas of growth or concern, and make data-driven decisions.

- The project is created using Tableau tool which not only presents the data in a visually appealing manner but also provides an interactive experience for readers to explore the intricacies of India's agricultural cultivation.

- However, the project has some limitations. The data used in the project might be outdated as it was collected between 1997 and 20211. Therefore,

it might not reflect the current state of agriculture in India. Additionally, the project might not be able to capture all the nuances of the agricultural sector in India.

- Overall, the India's Agricultural Crop Production Analysis(1997-2021) project is a valuable resource for understanding the agricultural sector in India. However, it should be used with caution and should not be considered as a definitive source of information.

5. APPLICATIONS

- The India's Agricultural Crop Production Analysis (1997-2021) project can be used by various stakeholders such as farmers, policymakers, researchers, and investors. Farmers can use the insights to make informed decisions about crop management, resource allocation, and market demand. Policymakers can use the data to develop policies that promote sustainable agriculture and ensure food security. Researchers can use the data to conduct further analysis and develop new insights into agricultural trends. Investors can use the data to identify potential opportunities for investment in the agricultural sector.

6. CONCLUSION

Dashboard 1: -

Map based on Longitude (generated) and Latitude (generated).

On the visualization location page data using latlong coordinates these gains the insights about the data that is given.

Dashboard 2: -

Our dashboard 2 is based on the cultivation of area based on location and crop plantation of some area and this is based crop plantation of some count.

Dashboard 3: -

Now this dashboard is all about the visualization based on features, yield by session ,and major crops and session vice production.

7. FUTURE SCOPE

- India’s Agricultural Crop Production Analysis (1997-2021) project is a comprehensive visual exploration of key aspects and trends in the agricultural sector. The project provides valuable insights into crop production, seasonal variations, regional distribution, and overall production trends. The visualizations enable intuitive analysis, allowing stakeholders to uncover patterns, identify areas of growth or concern, and make data-driven decisions.

- The future scope of this project could be to expand the scope of the analysis to include more recent data and to incorporate machine learning algorithms to predict crop yields. This could help farmers and policymakers make informed decisions about crop management, resource allocation, and food security.

- Another potential area of expansion could be to include data on the environmental impact of agricultural practices. This could help policymakers develop sustainable agricultural policies that balance economic growth with environmental conservation.