INDIA'S AGRICULTURE CROP PRODUCTION ANALYSIS

(1997-2021)

Analizing Indian agriculture crop production involves examining various factors such as crop types, production trends, challenges, and advancements. Here 's a breakdown:

- 1. **Crop Diversity**: India is known for its diverse agriculture, producing a wide range of crops including cereals (rice, wheat, maize), pulses (lentils, chickpeas), oilseeds (mustard, soybean), fruits (mangoes, bananas), vegetables (potatoes, onions), and cash crops (cotton, sugarcane).
- <u>2.**Production Trends**:</u> Crop production in India has shown both positive and negative trends over the years. While there has been significant growth in the production of certain crops due to technological advancements, irrigation facilities, and government policies, challenges like climate change, land degradation, and water scarcity have affected production negatively in some regions.
- <u>3.**Government Policies and Subsidies**:</u> The Indian government plays a crucial role in agriculture through policies, subsidies, and schemes aimed at boosting production, ensuring food security, and supporting farmers. Policies like Minimum Support Price (MSP), subsidies on fertilizers, and agricultural insurance schemes impact crop production.
- <u>4.**Challenges**:</u> Indian agriculture faces several challenges including unpredictable weather patterns, insufficient irrigation facilities, dependence on monsoon rains, land degradation, pest attacks, and post-harvest losses. These challenges often result in fluctuations in crop production and affect farmers' livelihoods.
- 5. **Technological Advancements**: Adoption of modern agricultural practices, mechanization, use of high-yielding crop varieties, genetically modified crops, precision farming techniques, and drip irrigation systems have contributed to increased crop production in some areas.

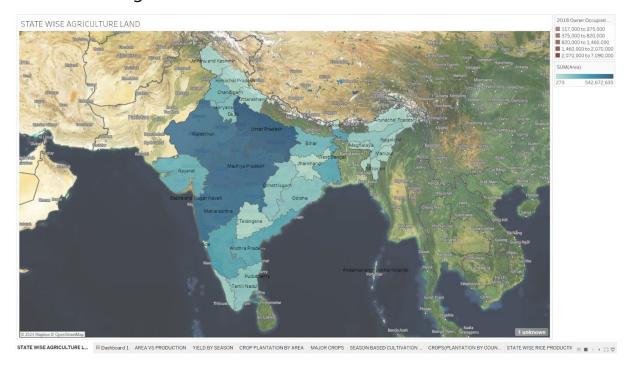
<u> $6\cdot$ **Market Dynamics**:</u> Crop production is also influenced by market demand, price fluctuations, export-import policies, and global market trends. Shifts in consumer preferences, trade agreements, and geopolitical factors impact crop production decisions.

7. **Sustainability Initiatives**: With growing concerns about environmental sustainability and climate change, there's a growing emphasis on sustainable agricultural practices, organic farming, agroforestry, and conservation agriculture to enhance crop production while minimizing negative impacts on the environment.

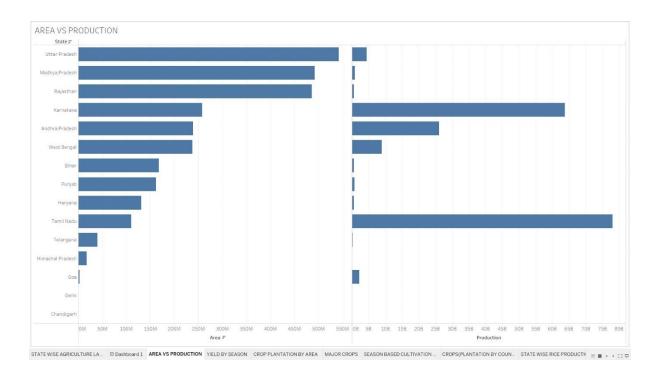
8. **Regional Disparities**: Crop production varies significantly across different regions of India due to variations in agro-climatic conditions, soil types, water availability, and socio-economic

1.VISUALIZATIONS

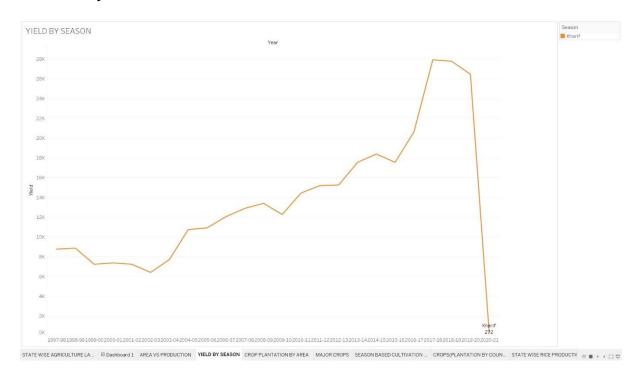
A. State wise agriculture land



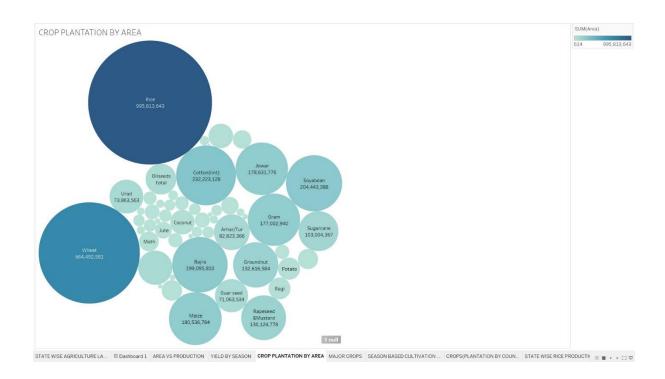
B. Area vs Production



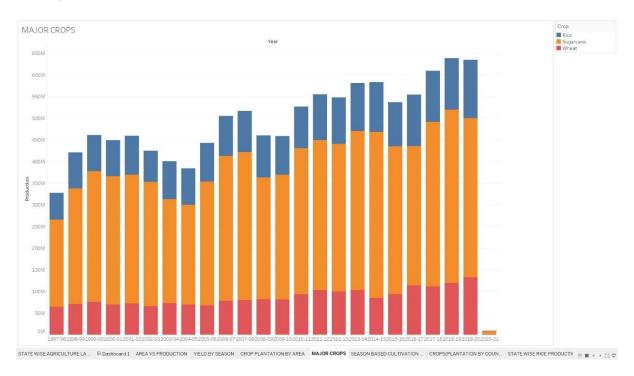
C. Yield by Season



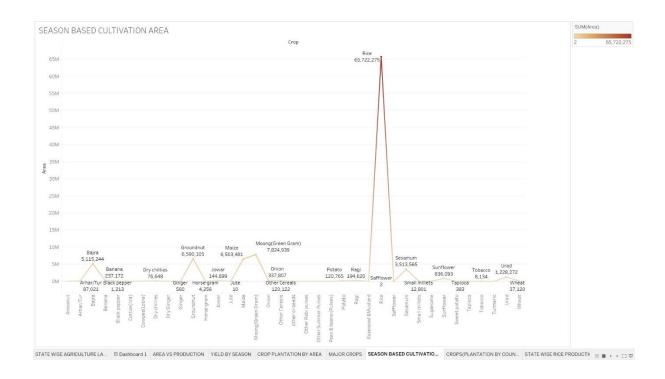
D. Crop plantation By Area



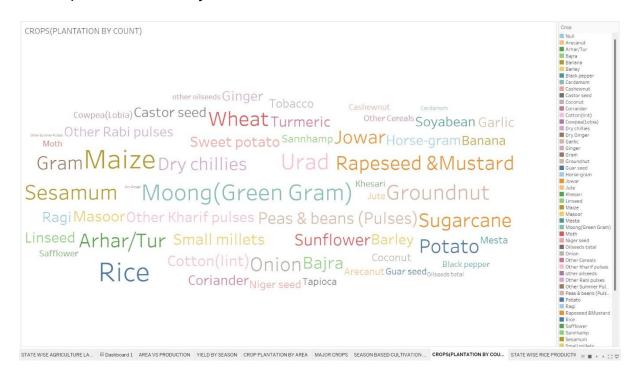
E. Major Crops



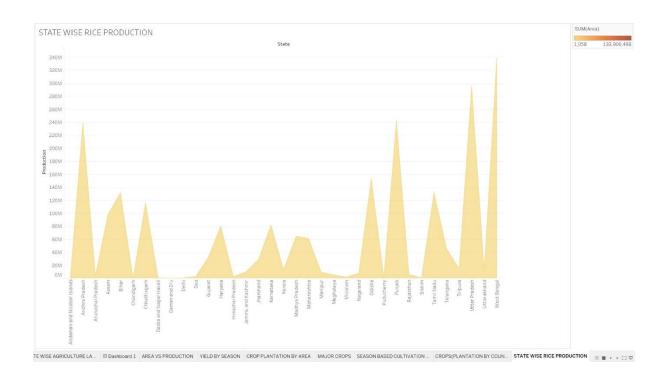
F. Season Based Cultivation Area



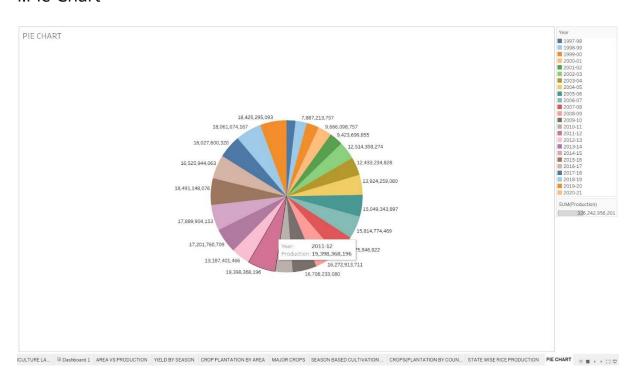
G. Crops (Plantation By Count)



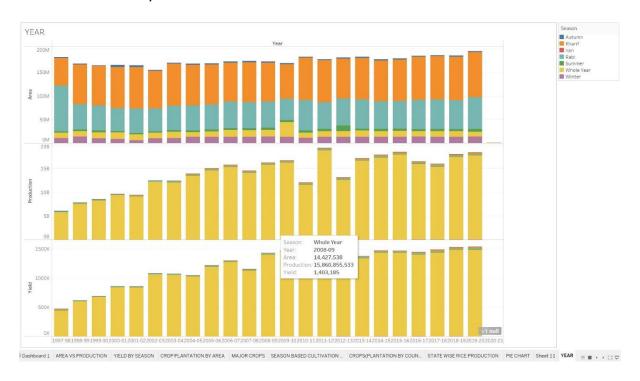
H. State Wise Rice Production



I.Pie Chart

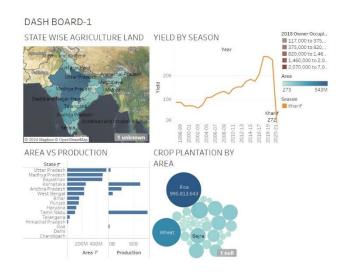


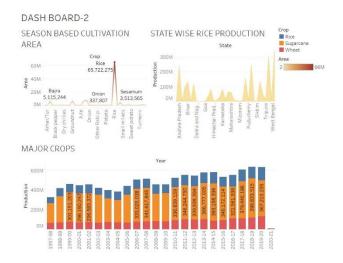
J. Year Wise Crop



2. Dashboards

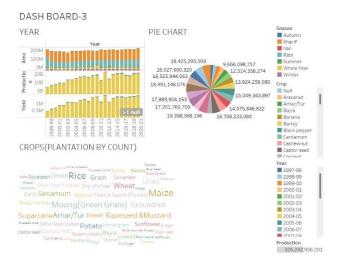
Dashboard-1





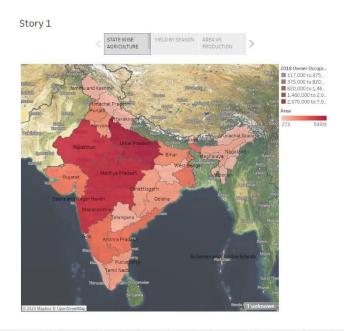
ROP PLANTATION BY AREA MAJOR CROPS SEASON BASED CULTIVATION... CROPS (PLANTATION BY COUN... STATE WISE RICE PRODUCTION PIE CHART Sheet 11 YEAR @ DASH BOARD-1 @ DASH BOARD-2 @ DASH BOARD-3 Q 🚊 🔳 🕻 + 🔾 🛡

Dashboard-3

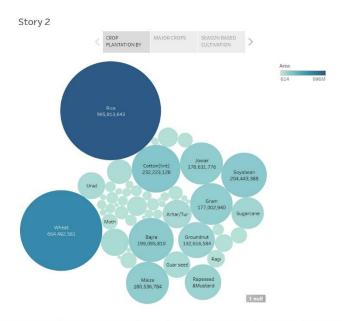


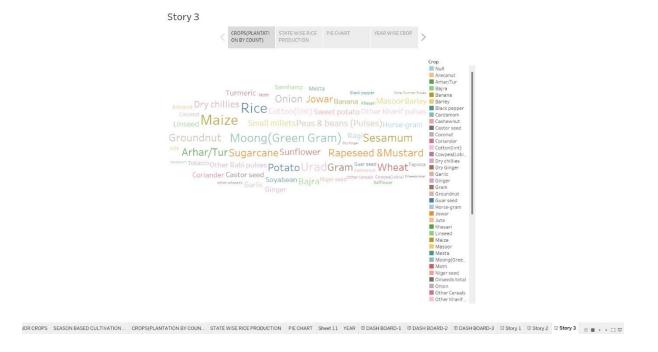
3.STORIES

Story-1

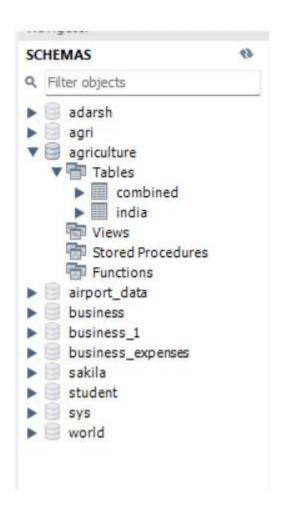


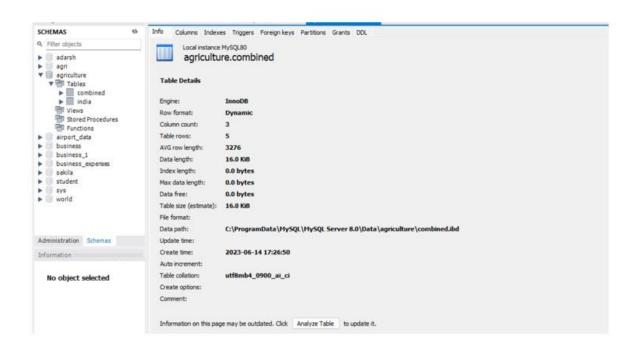
Story-2



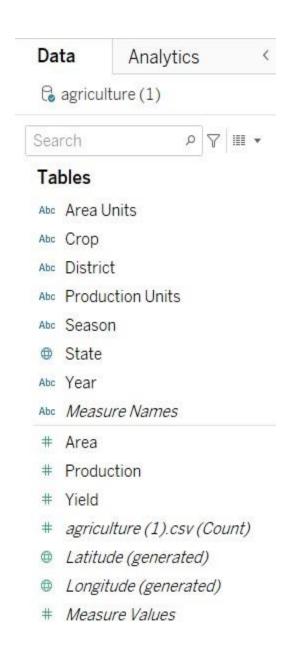


4. Amount of data render to DB



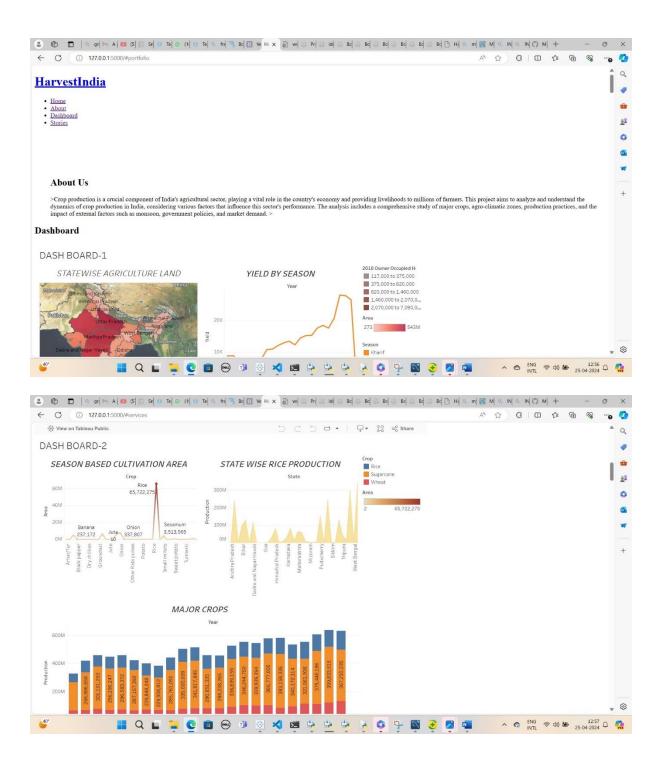


5. Calculated fields

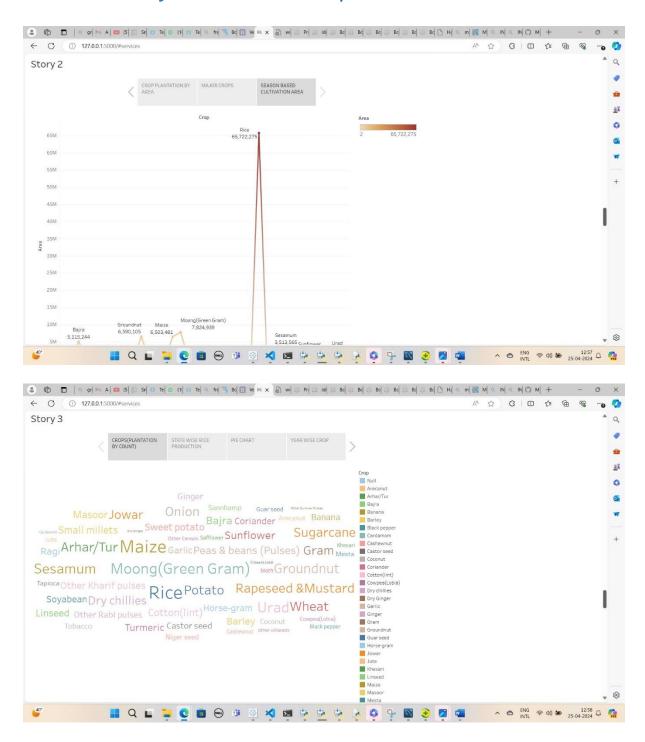


6.Web Integration by using FLASK

Embed dashboard with bootstrap



Embed Story with bootstrap



7. Project Report

This report delves into the 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.

By harnessing the power of Tableau, this report 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. To Extract the Insights from the data and put the data in the form of visualizations, Dashboards and Story we employed Tableau tool.

8. Data set:

"C:\Users\vali_\Downloads\agriculture (1)·csv"

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ROLL NO :21360008028

COLLAGE: SRI SANKAR'S DEGREE

COLLAGE(KURNOOL)

DOMAIN : DATA ANALYTICS WITH TABLEAU

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