INTRODUCTION:

1.1 Overview:

As per the 2014 FAO world agriculture statistics india is the world's largest producer of many fresh fruits like banana, mango, guava, papaya, lemon and vegetables like chickpea, okra and milk,major spices like chili pepper, ginger, fibrous crops such as jute, staples such as millets and castor oil seed. India is the second largest producer of wheat and rice, the world's major food staples.

Over the past 60 years India has shown a consistent national average annual increase in total production per hectare for some agricultural commodities. These resources mainly come from India's Green Revolution, improvement of road and power generation infrastructure, knowledge resources and reforms.

1.2 Purpose:

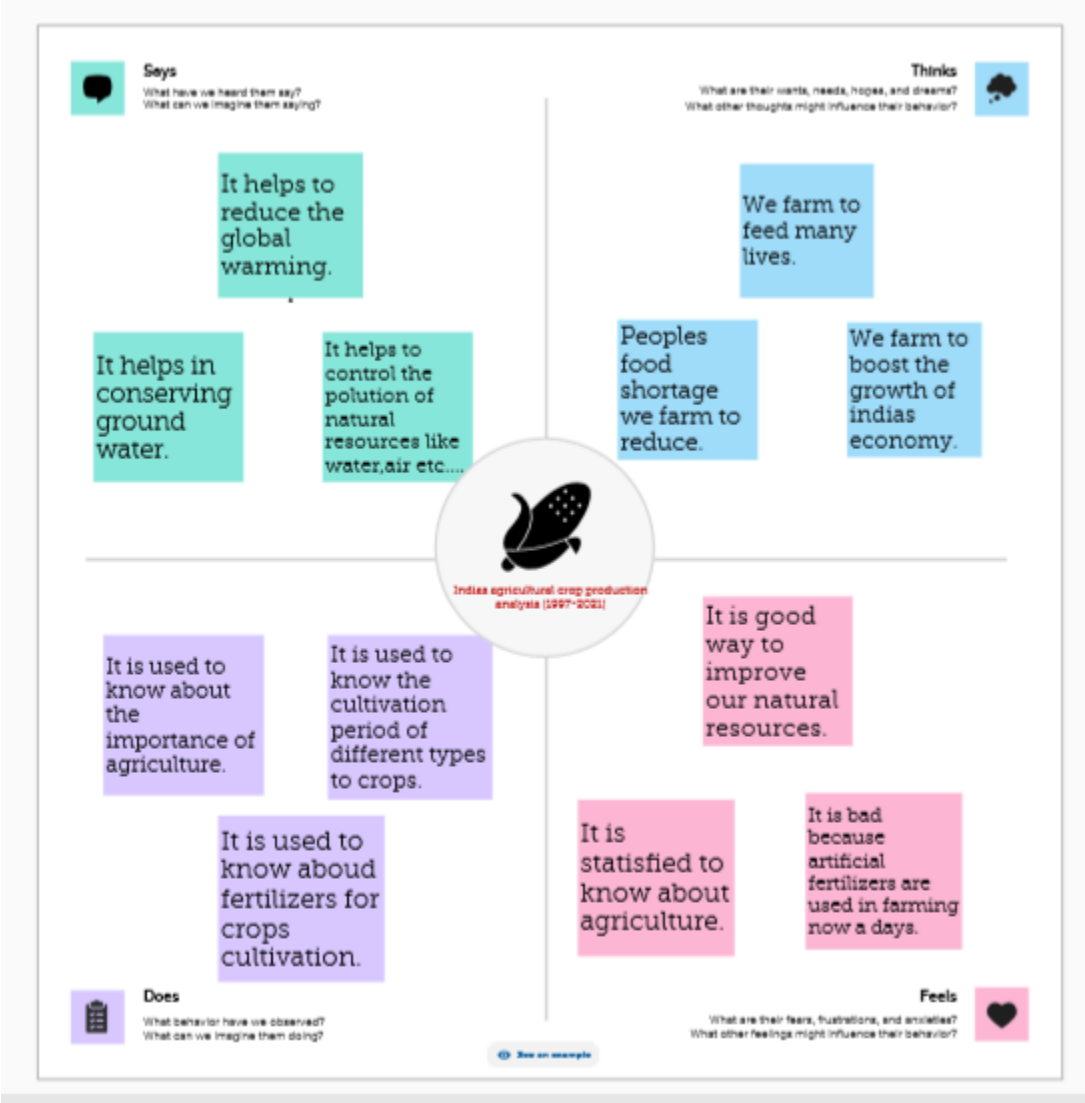
Agriculture is the foundation of the Indian economy. The population of India mostly depends on agriculture for their livelihood and agriculture contributes to 40 percent of the total GDP of the country. While agriculture is one of the most important sectors, it has taken a comparative backseat and the service sector is leading the way.

Relationship between Agriculture and Industrial Sector There is a constant need for raw materials and most of the industries of the country collect of raw materials from the agricultural sector. Half of the income which is generated in India in the industrial sector

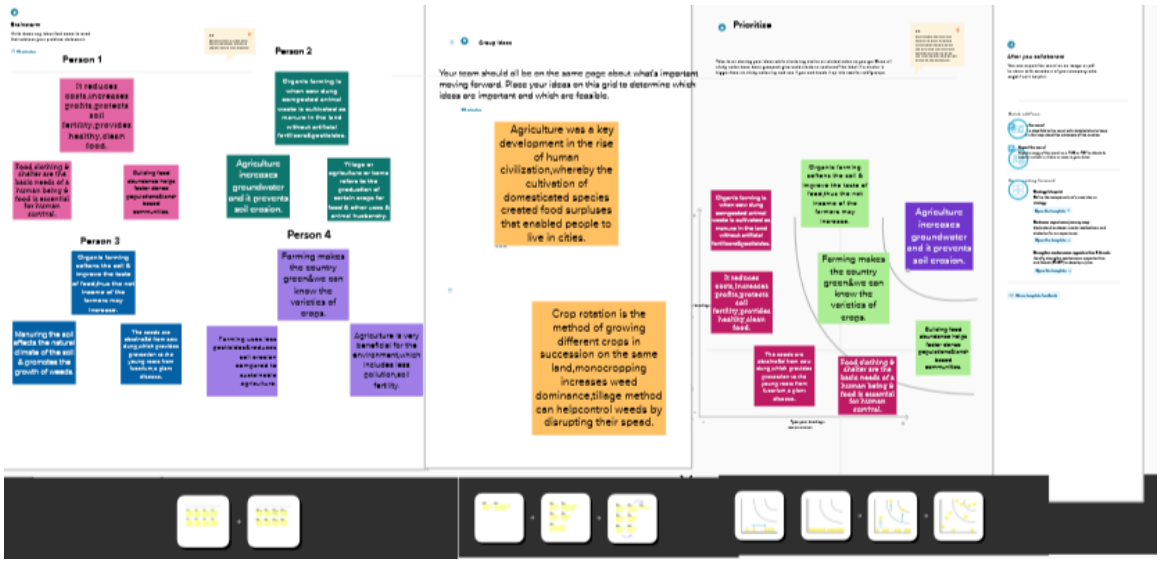
comes from agricultural-based industries and hence agriculture in India plays a very important role.

2. PROBLEM DEFINITION & DESIGN THINKING:

2.1 Empathy Map:

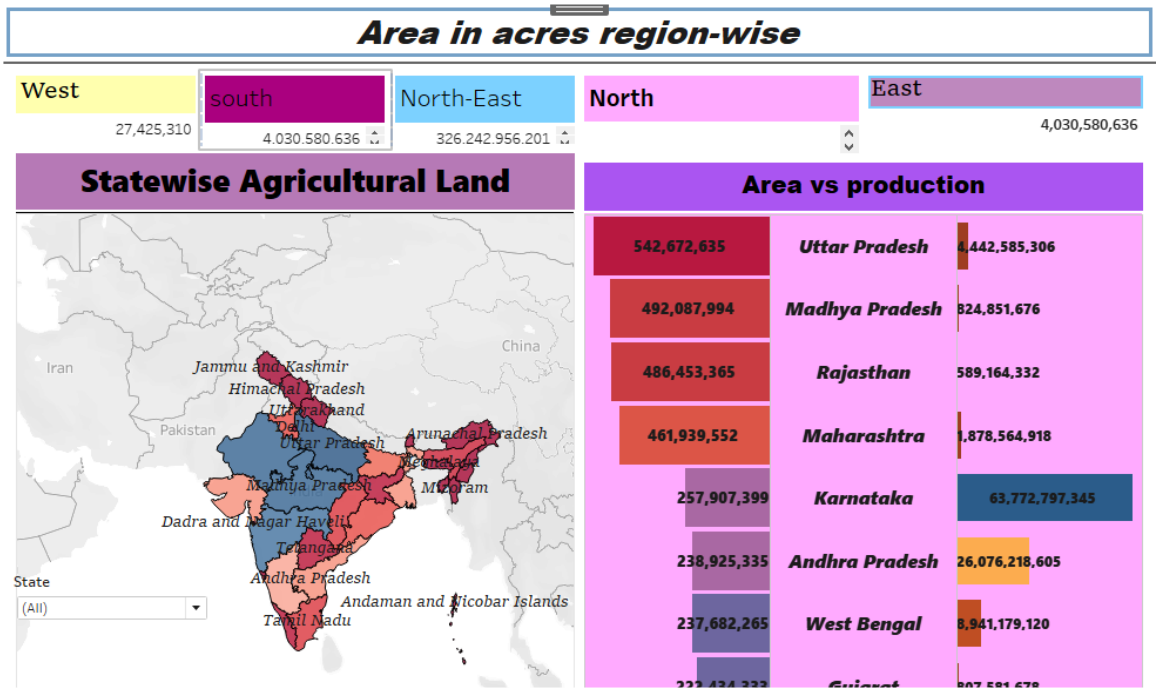


2.2 Ideation & Brainstorming map

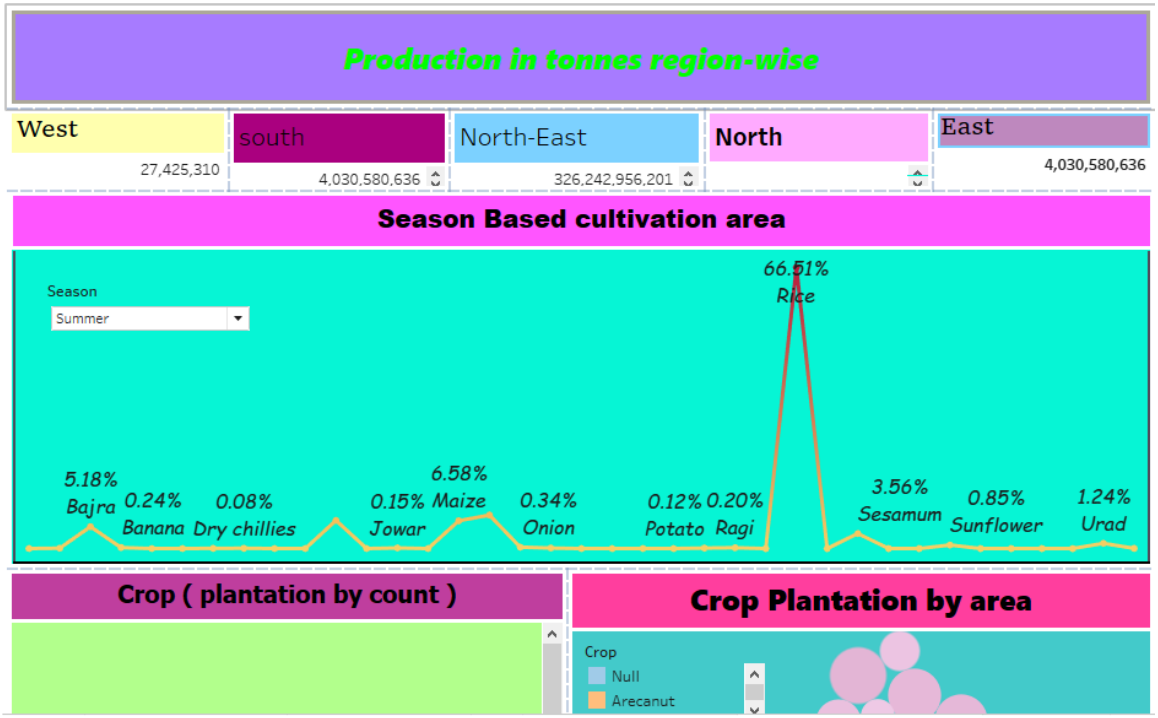


RESULT

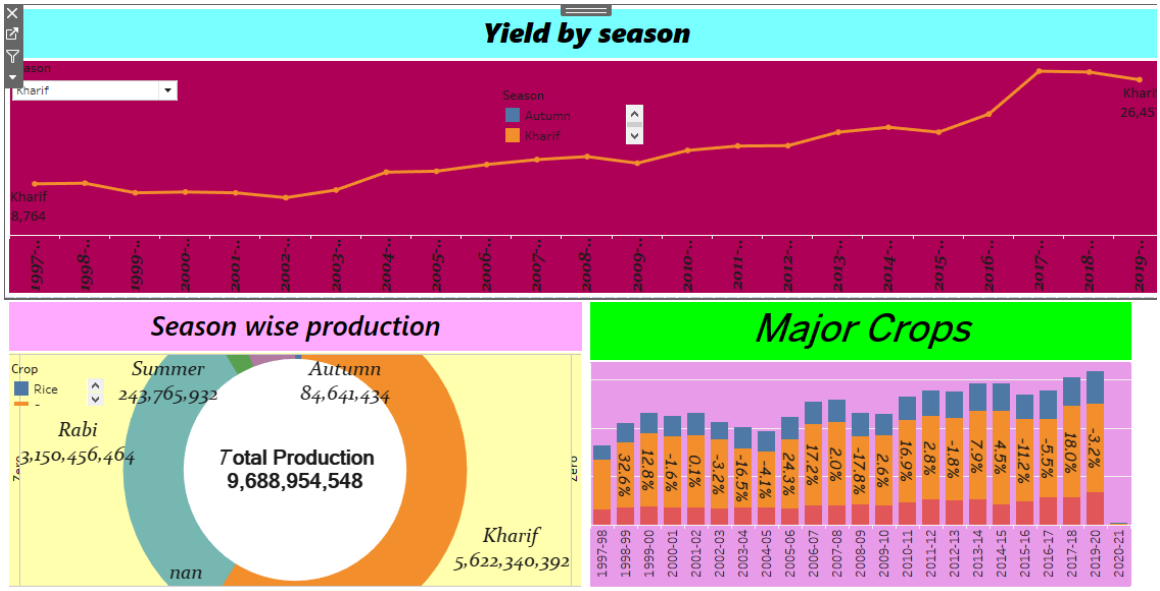
Dashboard 1



Dashboard 2



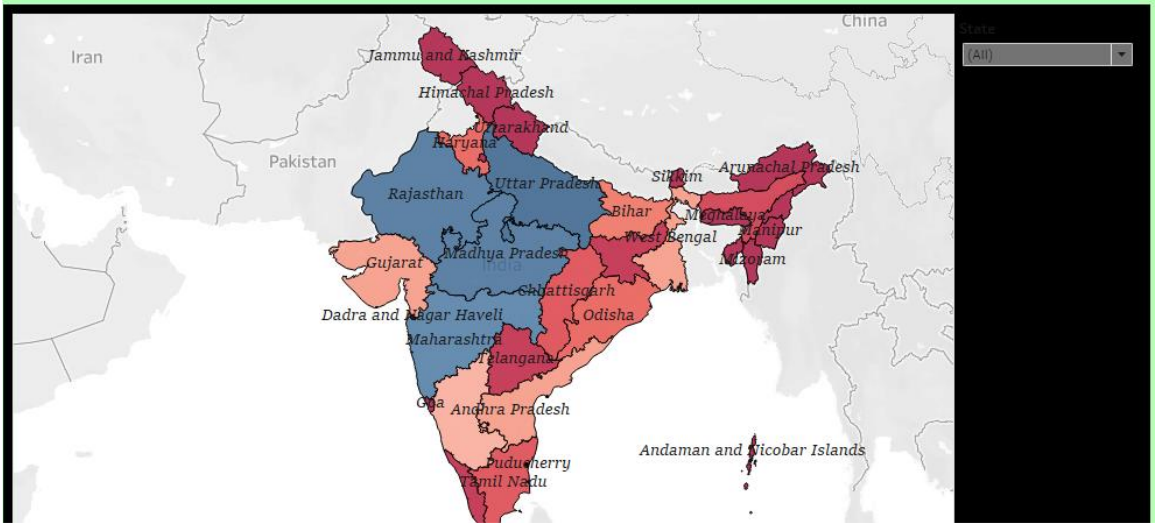
Dashboard 3



STORY 1

Insights into India's agricultural cultivation

India states: visualizing area Distribution -This | Area vs production: Top 10 indian states- This butterfly offers | Cultivation of crops in India: Seasonal percentage | Year-on-Year percentage Growth of Major Crops in India-



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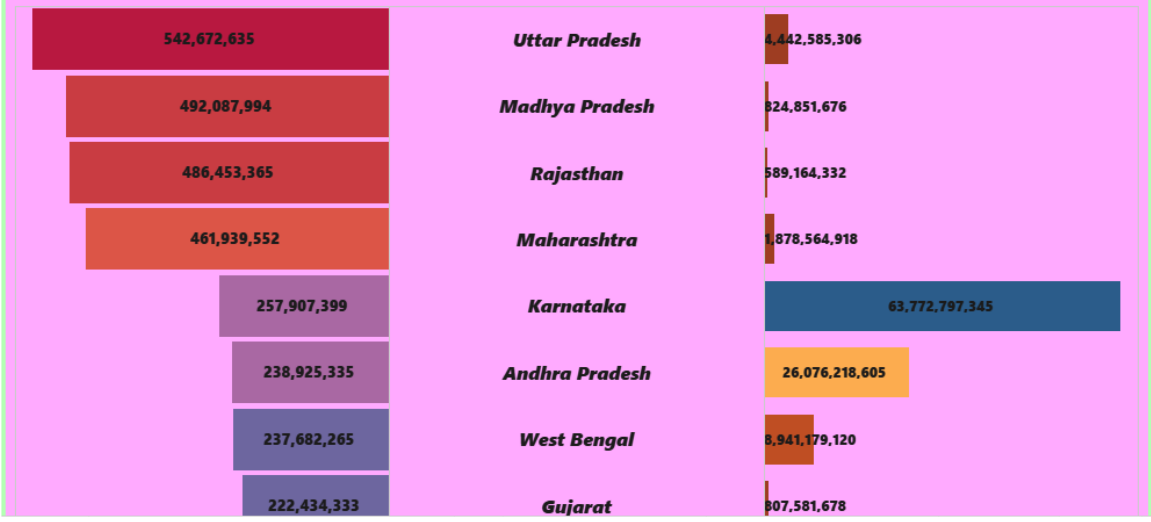
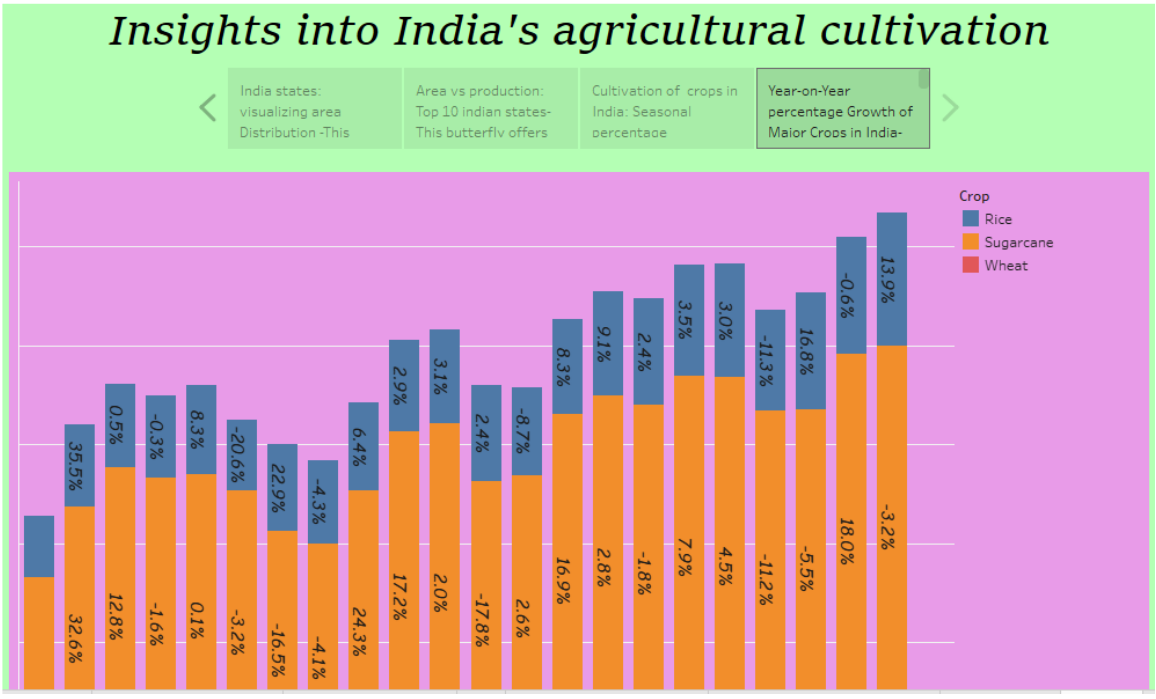


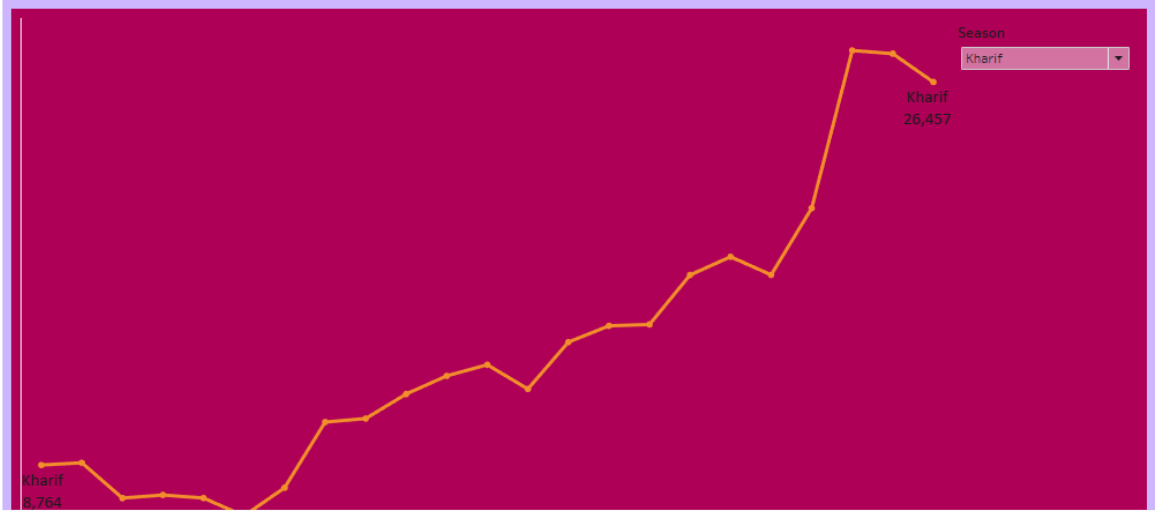

Insights into India's agricultural cultivation
India states: visualizing area Distribution -This
Area vs production: Top 10 indian states- This butterfly offers
Cultivation of crops in India: Seasonal percentage
Year-on-Year percentage Growth of Major Crops in India-
66.51%
Rice
Season
Summer


Insights into India's agricultural cultivation
India states: visualizing area Distribution -This
Area vs production: Top 10 indian states- This butterfly offers
Cultivation of crops in India: Seasonal percentage
Year-on-Year percentage Growth of Major Crops in India-
Crop
Rice
Sugarcane
Wheat
35.5%
32.6%
0.5%
12.8%
-0.3%
-1.6%
8.3%
0.1%
-20.6%
-3.2%
22.9%
-16.5%
-4.3%
-4.1%
6.4%
24.3%
2.9%
17.2%
3.1%
2.0%
2.4%
-17.8%
-8.7%
2.6%
8.3%
16.9%
9.1%
2.8%
2.4%
-1.8%
3.5%
7.9%
3.0%
4.5%
-11.3%
-11.2%
16.8%
-5.5%
-0.6%
18.0%
13.9%
-3.2%

STORY 2

Insights into India's agricultural cultivation

Crop Yield Growth: Year wise Analysis-This line chart provides a | Crop planting percentage: This that showcases the | Word cloud: The following word cloud gives a representation | Crop production in Tonnes: Season-This dount chart visually



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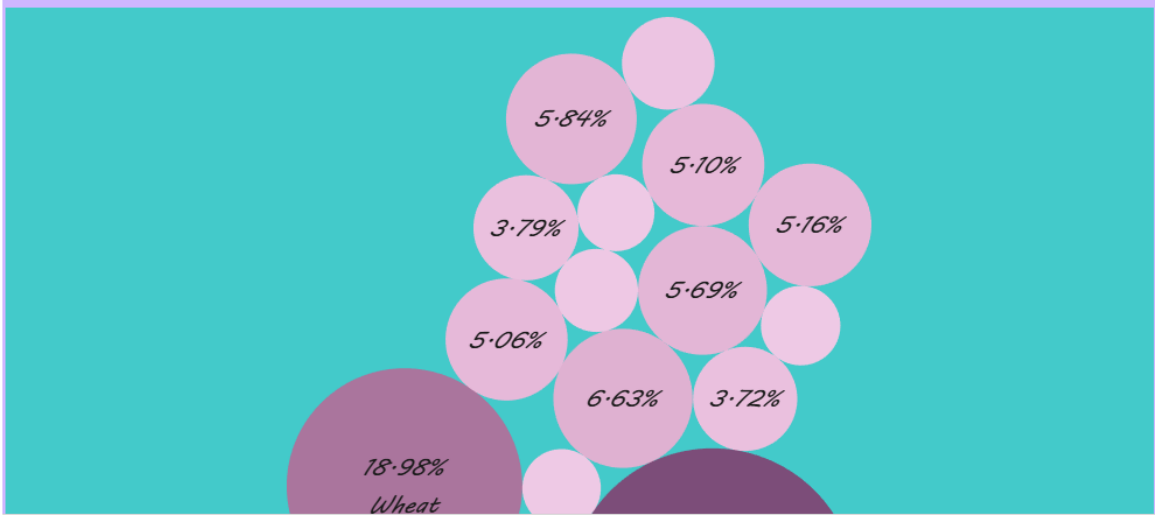

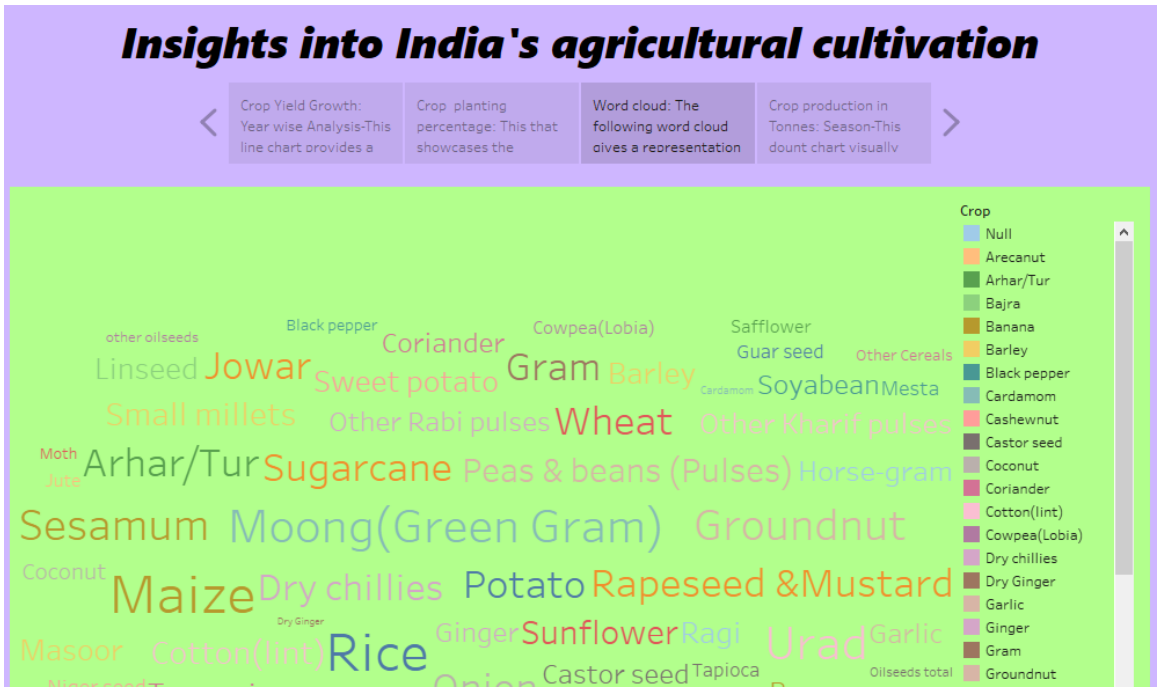

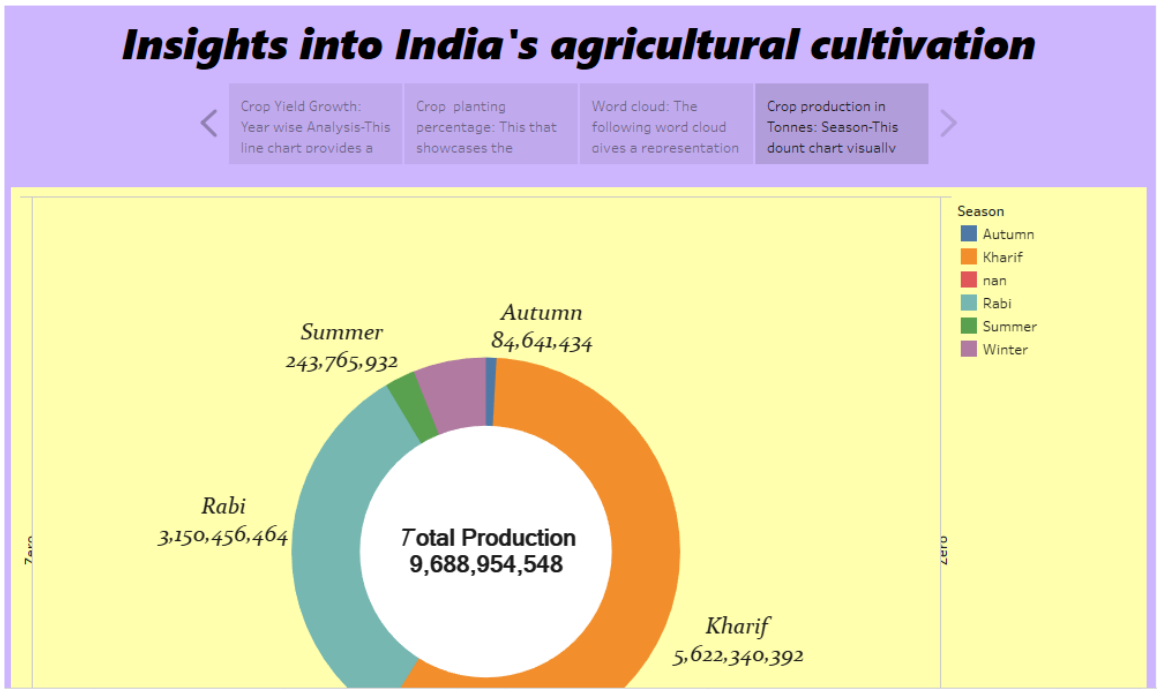

4. ADVANTAGES:

Unlike other farming methods, organic farming does not use artifical resources such as chemicals to repel insects or speed up the farming process.

Naturally grown fruits and vegetables are automatically better in terms of nutrition and taste as they are given more time.

Organic farming does not use any chemicals or cause any pollution. It is better than conventional farming. The entire world is affected by the ignorant methods of conventional agriculture, including animals.

5. DISADVANTAGES:

Environmental degradation due to excessive use of agricultural chemicals. Damage to natural resources such as soil, water and biodiversity.

Soil erosion is a natural process that happens when wind or water moves soil particles to another. When this happens on a large scale, it causes serious problems for farmers.

6. APPLICATIONS:

Agricultural applications include the improvement or modification of soil, crops, livestock, poultry, fish or shellfish and their by-products related to human health products and plant and animal diets designed or modified to improve their hralth properties.

7. CONCLUSION:

Agriculture is an important sector of the country. It is one of the market-driven industries that employ a large segment of the country's population. The new changes over the last few years have been

enormously helpful to contribute more towards economic growth. Recent advantages such as drones,and data-driven facilities help to monitor the process of farming. It has been supporting farmers to increase productivity and contribute more towards agricultural economy.

The future of Indian agriculture seems bright and promising with the advent of new technologies. The government has increased its focus on the sector, implementing various policies and initiatives to boost productivity and growth. India's vast and diverse agricultural landscape, coupled with advantages in technology, provides immense oppurtunities for farmers to harness their potential and increase yield.

8. FUTURE SCOPE:

Demand for food crops increases while every industry cuts, underscoring the need for agricultural production.

The future of agriculture is highly developed technologies such as robotics, temperature and humidity sensors, aerial imagery and GPS. These state-of-the-art equipment, robotic systems, and precision agriculture will make farming more productive, efficient,safe, and environmentally sustainable.