

# *India's Agricultural Crop Production Analysis*

## **1.Introduction:**

***India is a large producer of several agricultural products. In terms of quantity of production, India is the top producer in the world in milk, and second largest in wheat and rice. Agricultural production is prone to several risks which affect both producers and consumers.***

### **1.1.Overview:**

***Agriculture is an evolutionary process that consists of a series of activities such as the production of food, fibers, feed, and raising of domesticated animals to fulfill the demand of the population. Agriculture is a key to development in the area of human civilization.***

### **1.2.Purpose:**

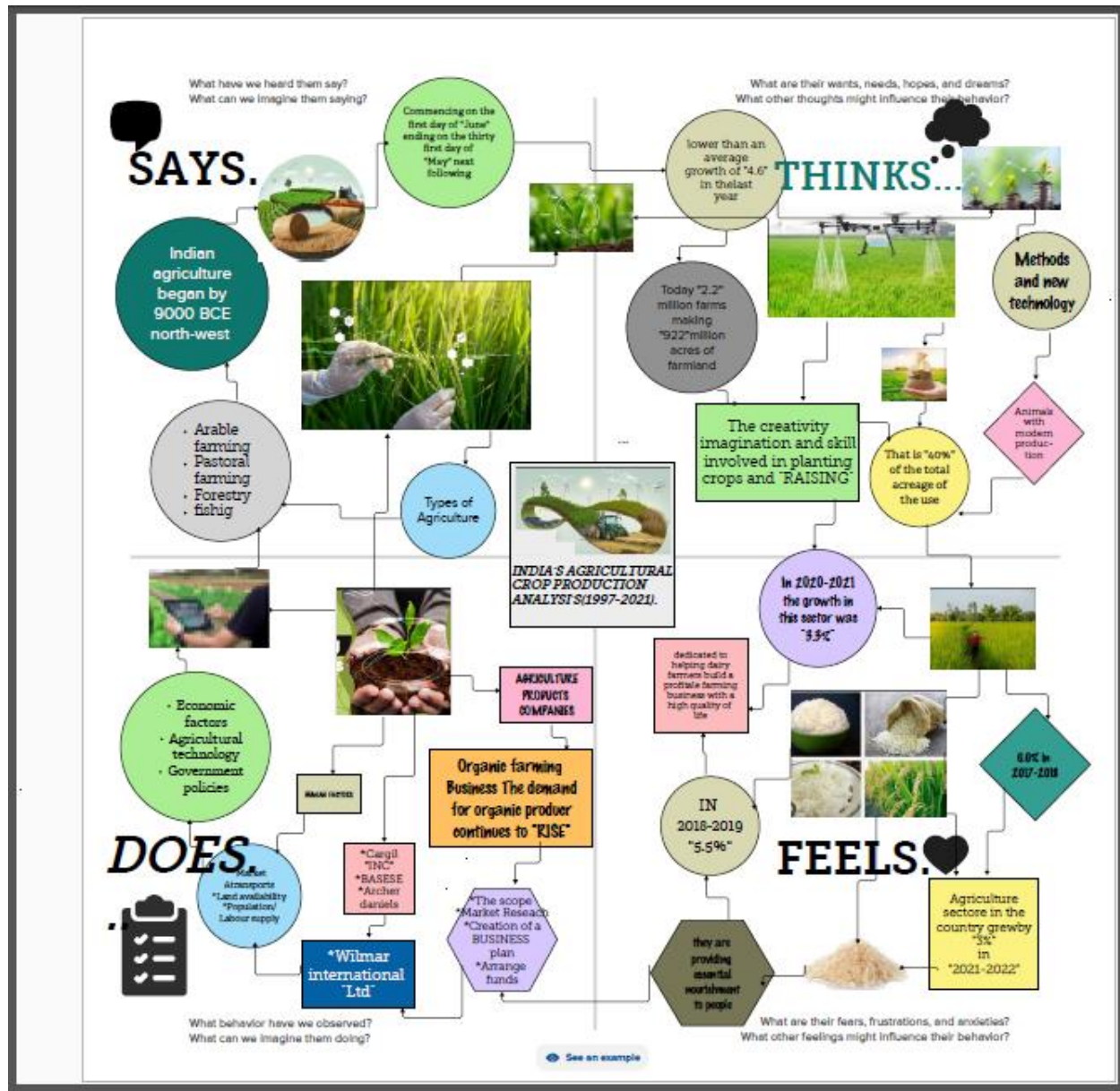
***Agriculture impacts society in many ways, including: supporting livelihoods through food, habitat, and jobs; providing raw materials for food and other products; and building strong economies through trade.***

## **2.Problem Statement & Design Thinking:**

***Creating sustainable supply chains: Design thinking can be used to create more sustainable supply chains for agricultural products.***

For example, a company could use design thinking to develop a system for tracking the origin of their products, ensuring that they are sourced from sustainable and ethical sources.

## 2.1. Empathy Map:



The collage displays six different templates for brainstorming and idea prioritization, each with a unique layout and set of instructions.

- Template 1 (Top Left):** Features a 'Before you collaborate' section with instructions on how to use the template. It includes a 'Brainstorm & idea prioritization' section with a list of instructions and a 'Group ideas' section with a list of instructions.
- Template 2 (Top Middle):** Features a 'Before you collaborate' section with instructions. It includes a 'Define your problem statement' section with a list of instructions. It also includes a 'Brainstorm' section with a list of instructions and a 'Group ideas' section with a list of instructions.
- Template 3 (Top Right):** Features a 'Before you collaborate' section with instructions. It includes a 'Define your problem statement' section with a list of instructions. It also includes a 'Brainstorm' section with a list of instructions and a 'Group ideas' section with a list of instructions.
- Template 4 (Bottom Left):** Features a 'Before you collaborate' section with instructions. It includes a 'Define your problem statement' section with a list of instructions. It also includes a 'Brainstorm' section with a list of instructions and a 'Group ideas' section with a list of instructions.
- Template 5 (Bottom Middle):** Features a 'Before you collaborate' section with instructions. It includes a 'Define your problem statement' section with a list of instructions. It also includes a 'Brainstorm' section with a list of instructions and a 'Group ideas' section with a list of instructions.
- Template 6 (Bottom Right):** Features a 'Before you collaborate' section with instructions. It includes a 'Define your problem statement' section with a list of instructions. It also includes a 'Brainstorm' section with a list of instructions and a 'Group ideas' section with a list of instructions.

## Dashboard

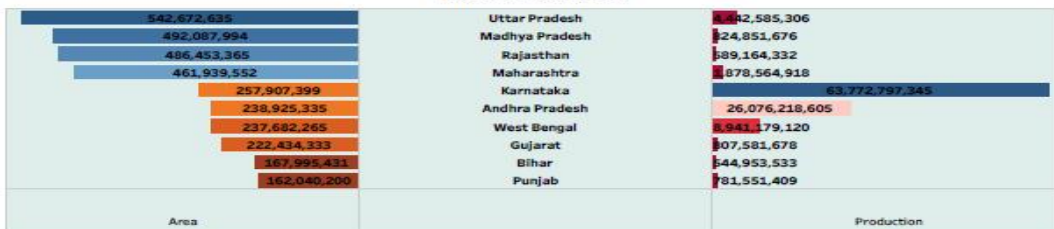
### State wise Agricultural Land



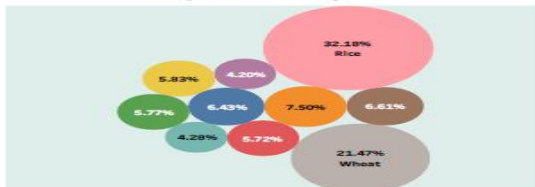
### Yield By Season



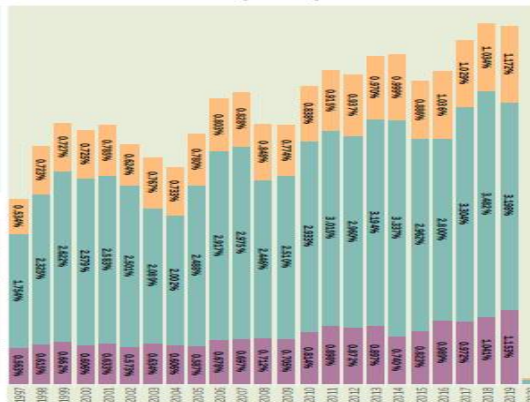
### Area vs Production



### Crop Plantation by Area

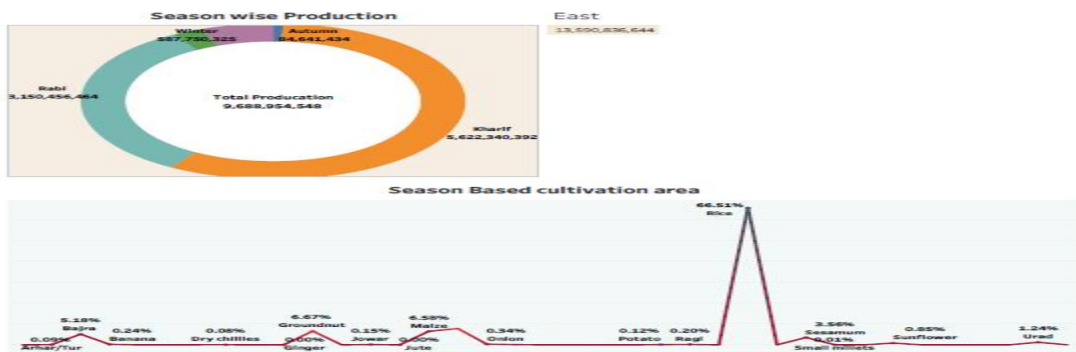


### Major Crops



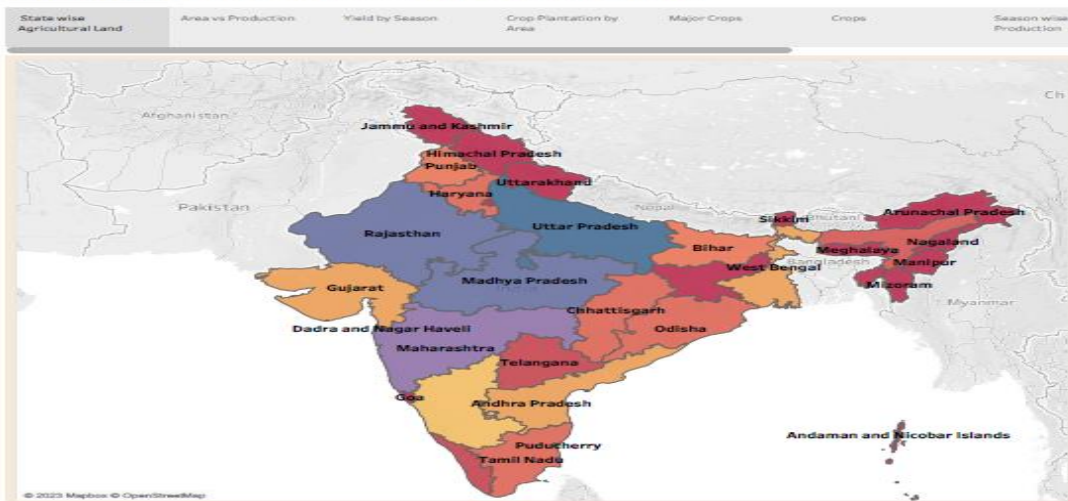
### Crops(Plantation by count)





## Story

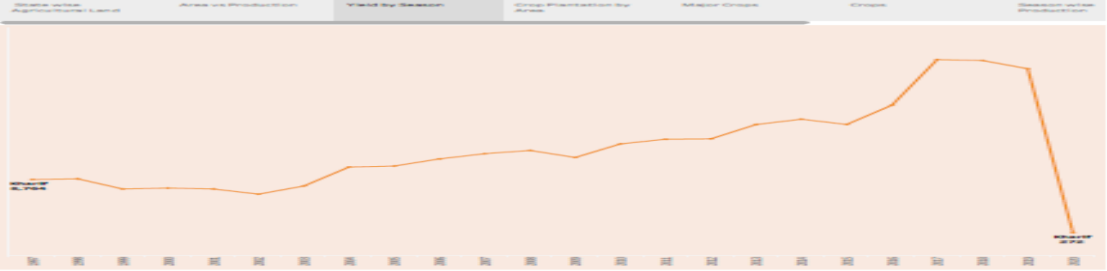
### India's Agricultural Crop Production Analysis(1997-2021)



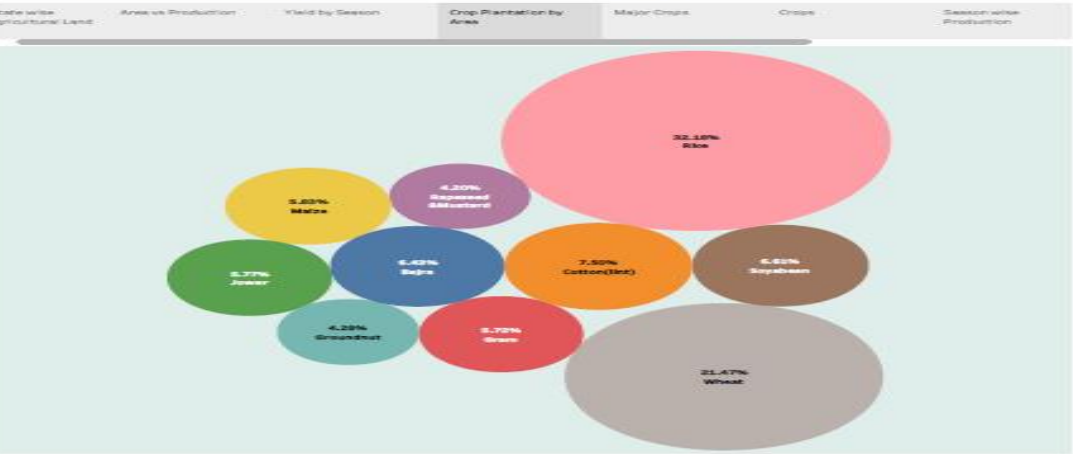
India's Agricultural Crop Production Analysis(1997-2021)



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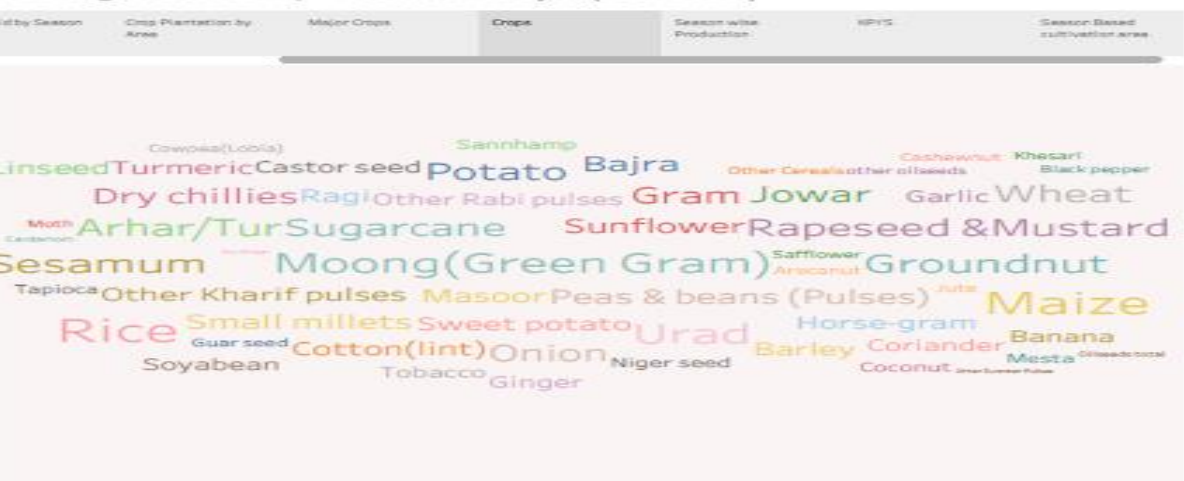




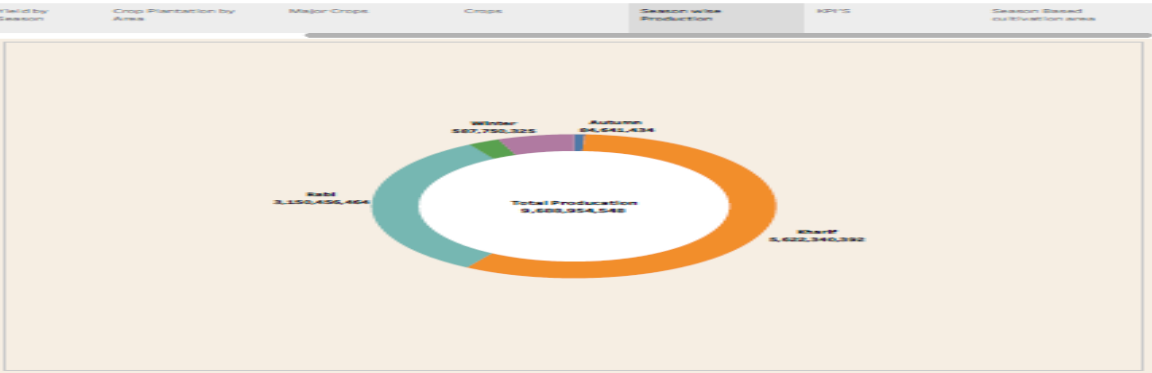
India's Agricultural Crop Production Analysis(1997-2021)

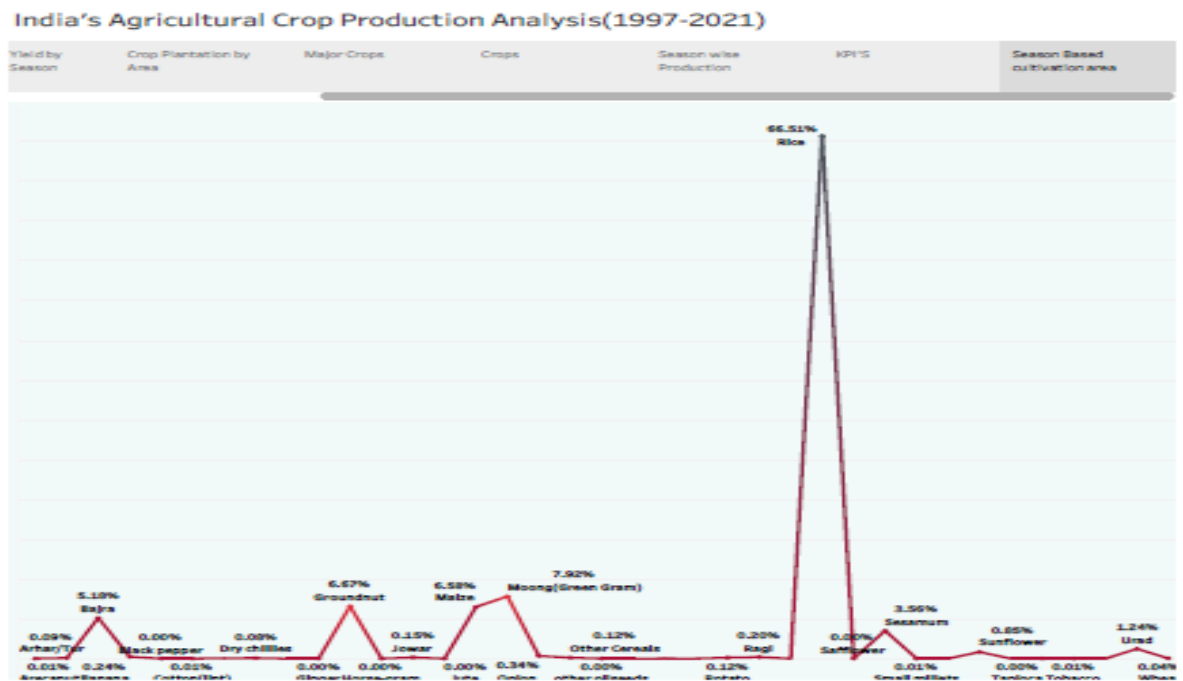
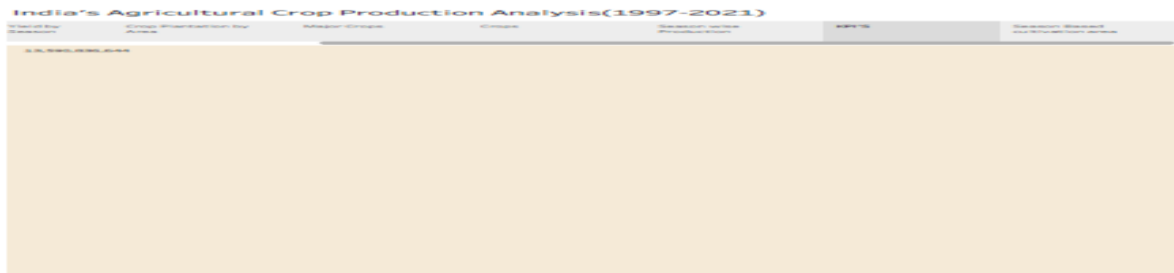


India's Agricultural Crop Production Analysis(1997-2021)



India's Agricultural Crop Production Analysis(1997-2021)





#### **4.Advantages:**

***Diversification of crops reduces risk of financial loss due unfavorable conditions. Diversification of crops means variety of crops can be grown for meeting the domestic needs of farmers and livestock, to reduce risk of market fluctuations, mechanism of farming, growing expensive crops.***



#### **4.1.Disadvantages:**

***Erosion of soil by heavy rain, floods, insufficient vegetation cover etc., reduces farm productivity. Inadequate irrigation facilities and poor management of water resources have led to a great decline in agricultural productivity.***

#### **5.Applications:**

***Data mining in agriculture is a recent research topic consisting of the application of data mining and data science techniques to agriculture. Recent technologies are able to provide extensive data on agricultural-related activities, which can then be analyzed in order to find relevant information.***

#### **6.Conclusion:**

**India's agricultural sector is still very important to the Indian economy, although its share of the economy has decreased over the past 50 years.**

#### **7.Future Scope:**

***In the coming years, smart farming is projected to create a massive impact on the agricultural economy by bridging the gap between small and large-scale businesses. The trend is not only pertinent in developed countries — developing countries have also realized its immense importance as well.***