



PACHAIYAPPA'S COLLEGE FOR MEN KANCHIPURAM
DEPARTMENT OF MATHEMATICS

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

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India's Agriculture Crop Production Analysis

⊗ Introduction

⊗ Problem Definition and Design Thinking

⊗ Advantages and Disadvantages

⊗ Applications

⊗ Future Scope

☒ Steps in tableau dashboard and story

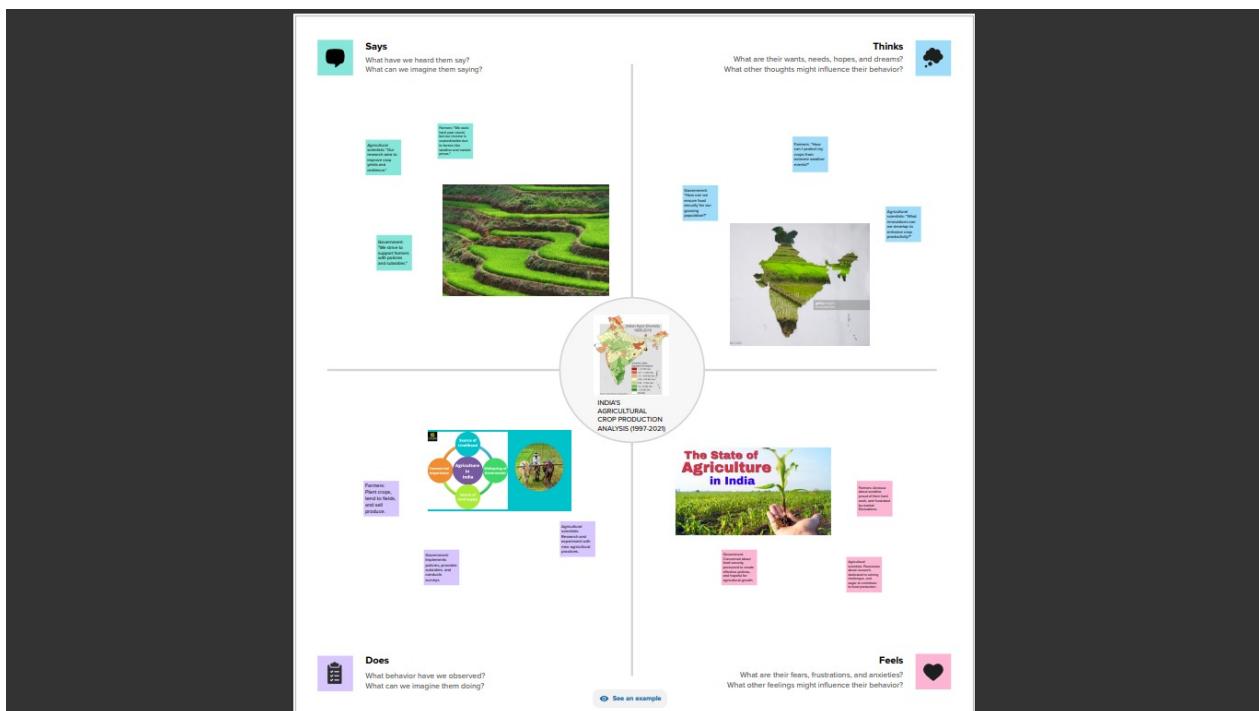
☒ Conclusion

Problem Definition

Analyzing the accessibility of farmers to markets, including issues related to transportation, infrastructure, and pricing. Assessing the degradation of arable land due to factors such as soil erosion and overuse of agrochemicals.

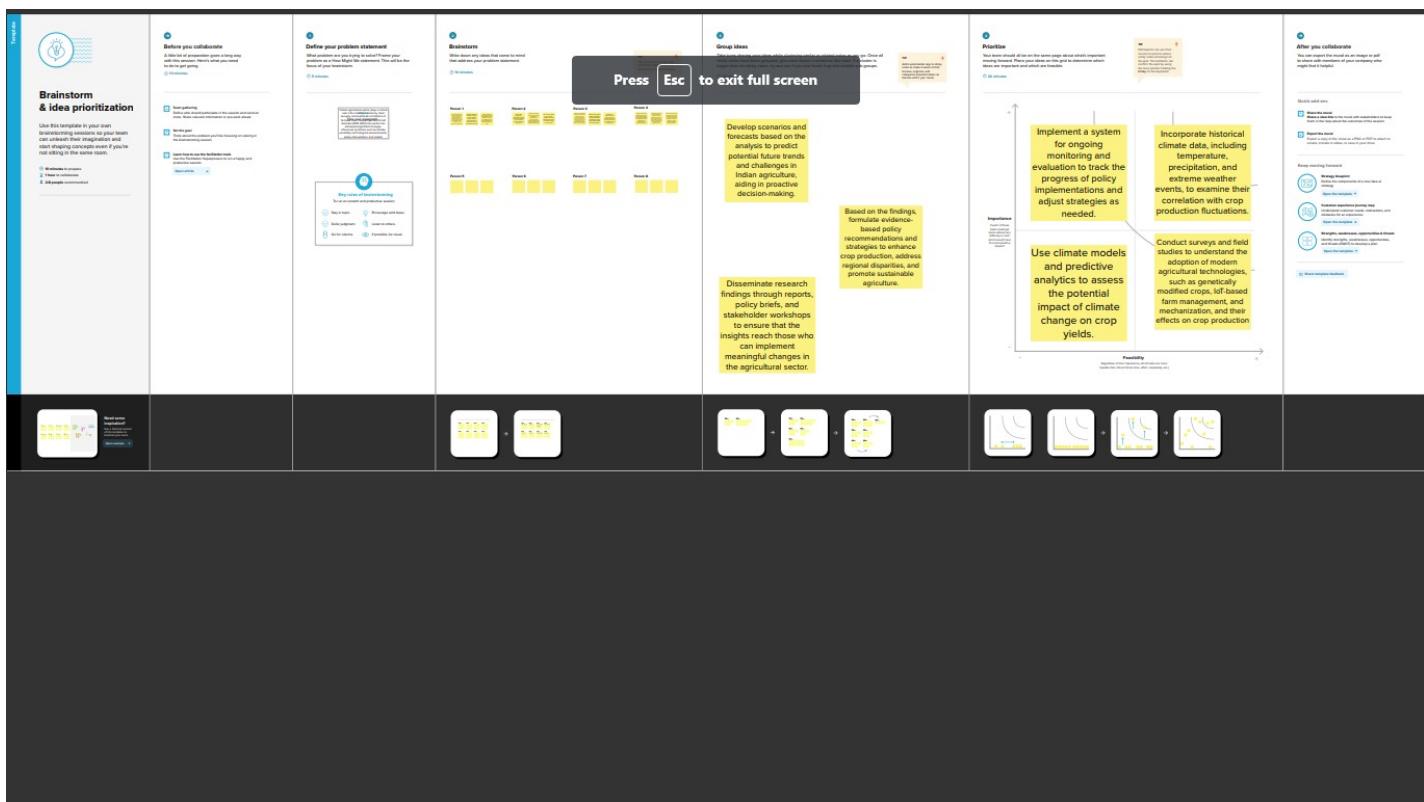
EMPATHY MAP

We have created the Empathy map by better understanding of problem



Brainstorm and Idea Prioritization

As team we pointout the collect ideas as per person in the Brainstorm map



^B Advantages and disadvantages of agricultural crop production analysis

ADVANTAGES:

India is one of the world's most biodiverse countries, with a wide range of crops grown, ensuring a diverse and resilient agricultural system. The country produces a vast array of crops, from staple

cereals like rice and wheat to spices, fruits, and vegetables, providing a rich and varied diet.

DISADVANTAGES:

The overuse of arable land, soil erosion, and improper land management practices have resulted in land degradation, reducing long-term productivity. Indian

agriculture is highly dependent on monsoons, making it vulnerable to erratic rainfall, droughts, and floods, which can lead to crop failures.

APPLICATIONS:

The primary application of Indian crop production is to ensure an adequate and stable food

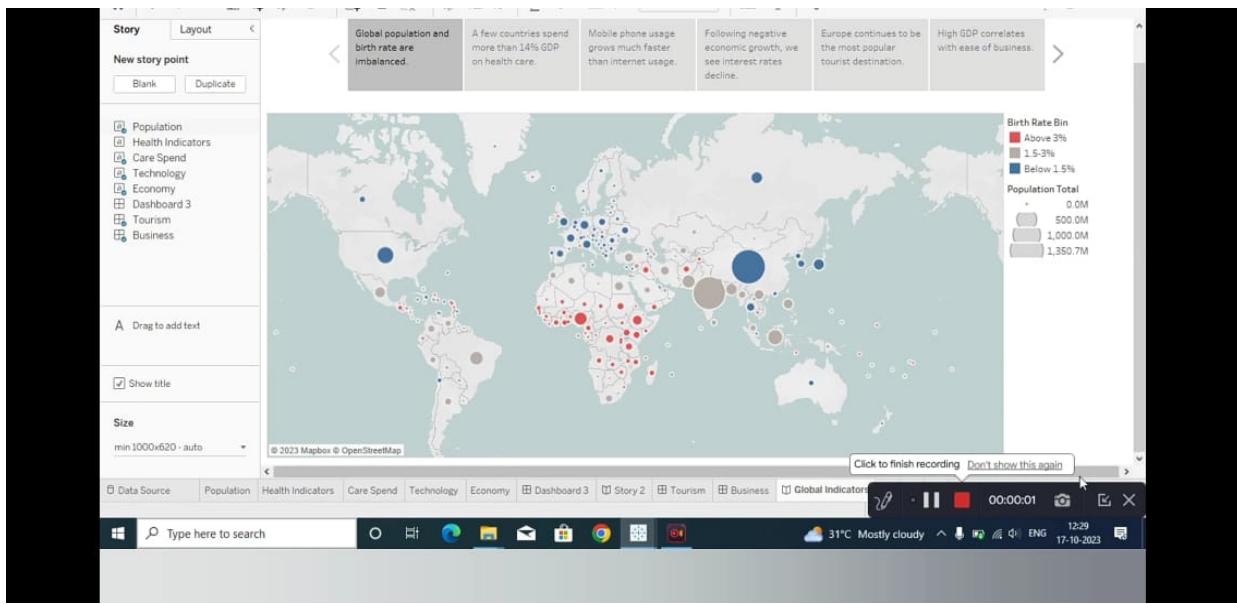
supply for the country's growing population, reducing dependency on food imports. Indian agricultural products, including rice, wheat, spices, and tea, are exported globally, contributing significantly to foreign exchange earnings.

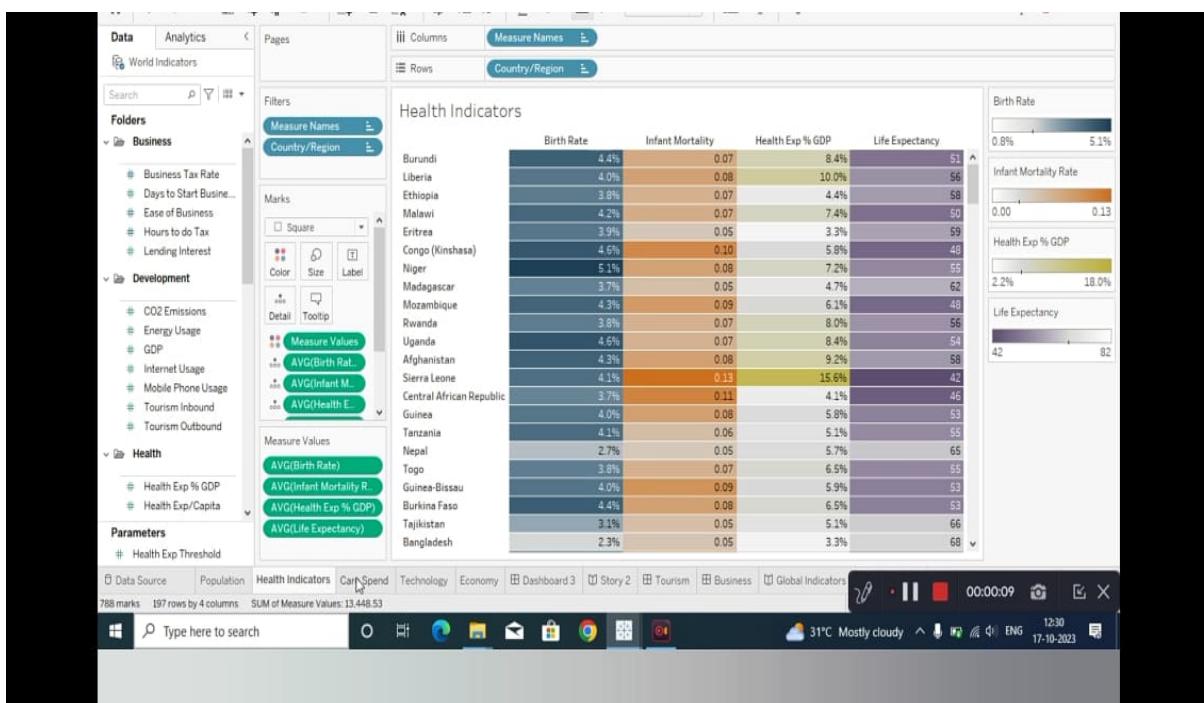
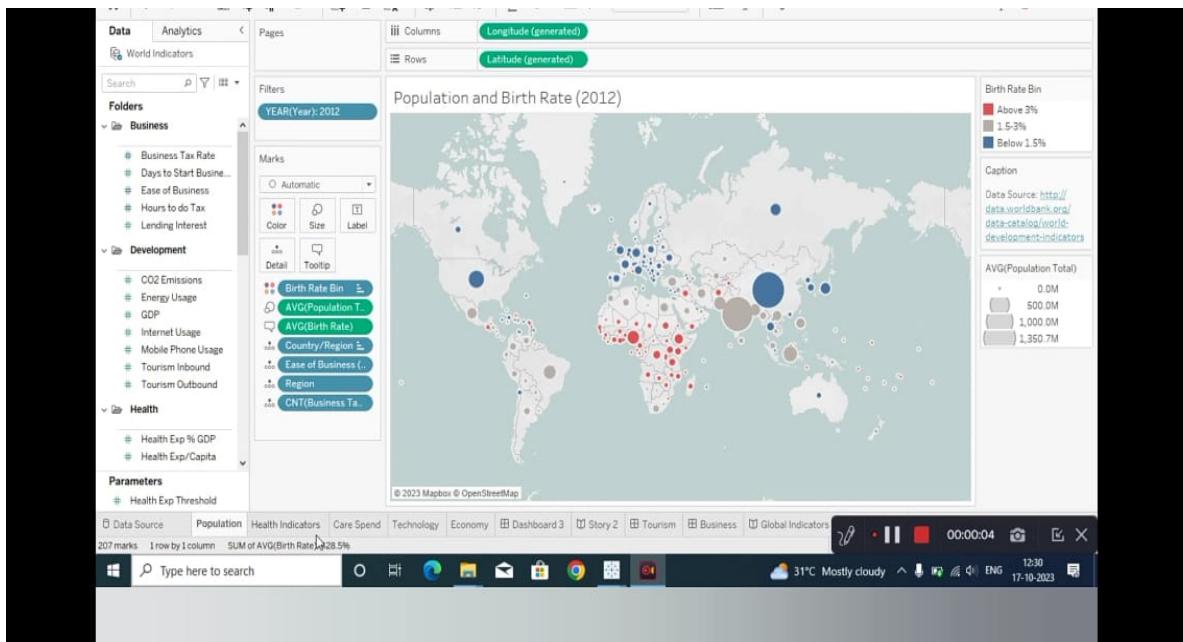
FUTURE SCOPE:

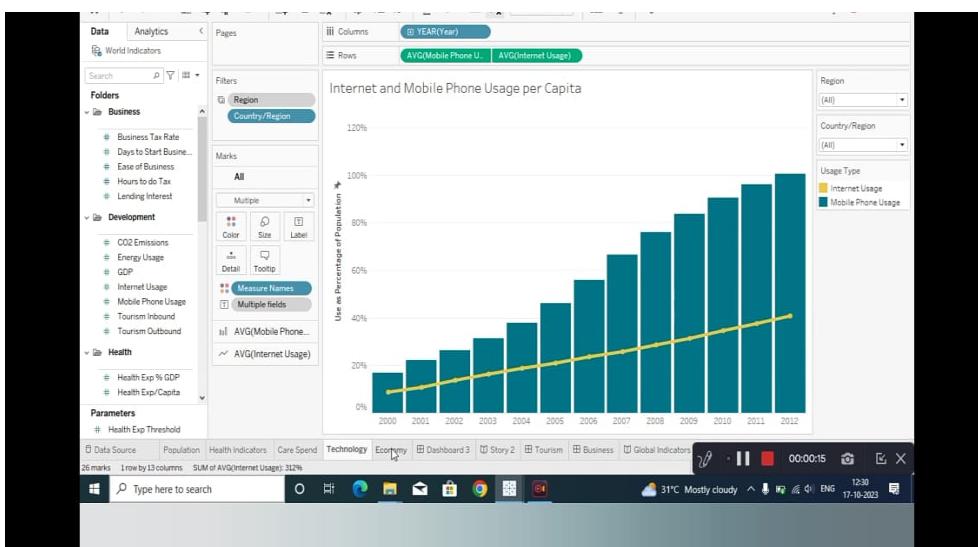
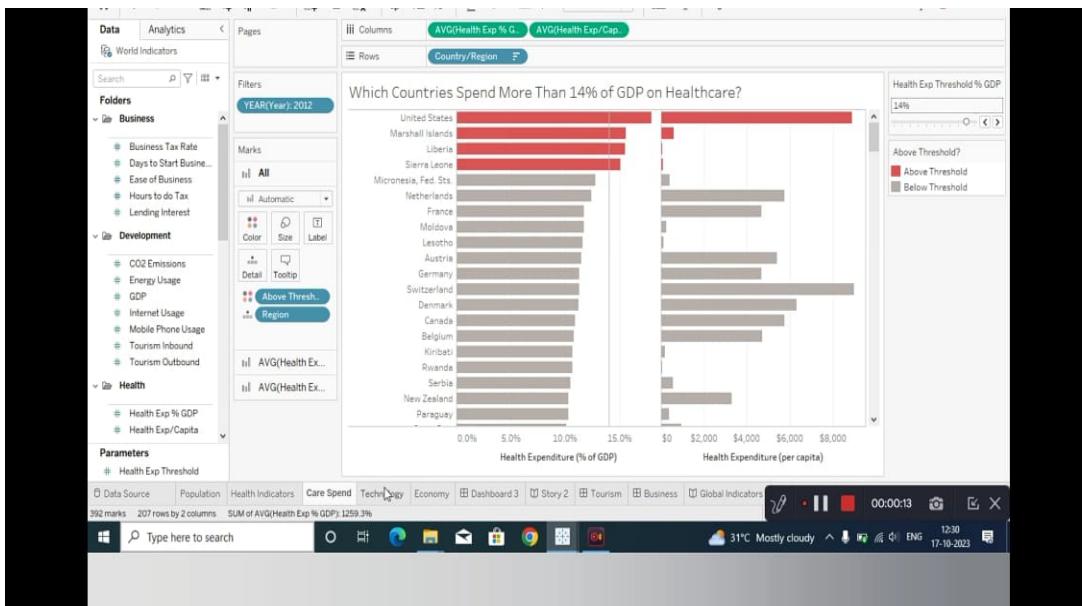
India will increasingly adopt climate-smart agricultural practices to mitigate the impact of climate change, including drought-resistant crop varieties and water-efficient farming techniques. Continued advancements in agricultural technology, such as precision farming, IoT-

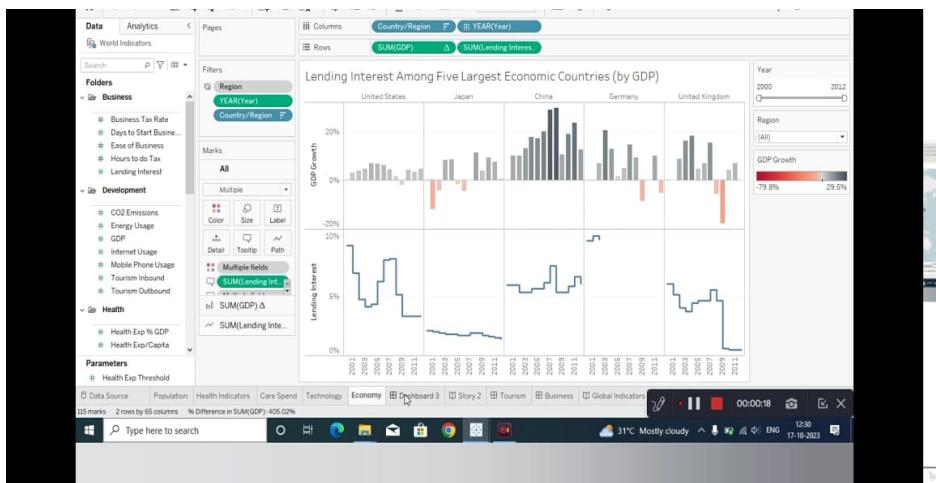
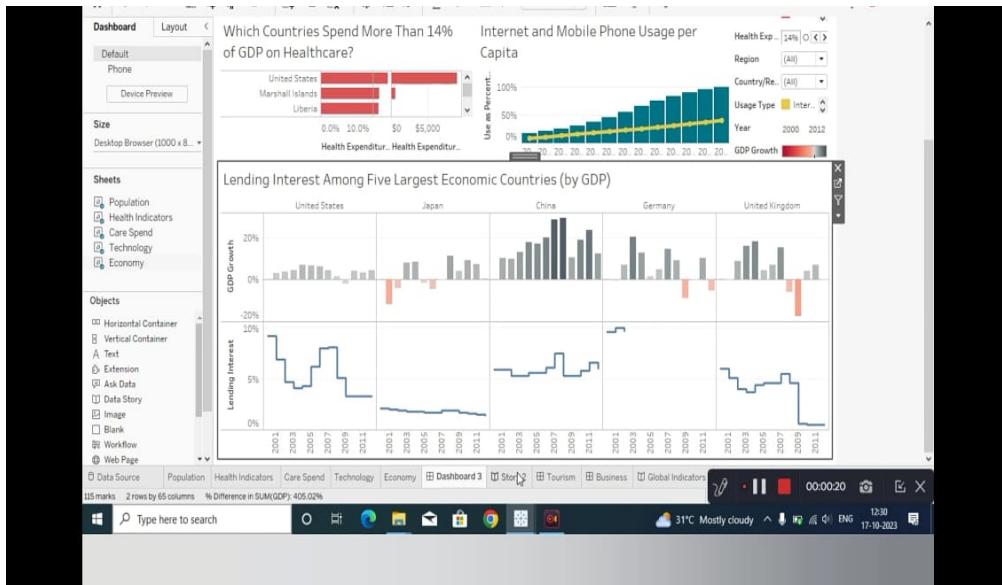
based crop monitoring, and AI-driven decision support systems, will enhance crop productivity and resource management.

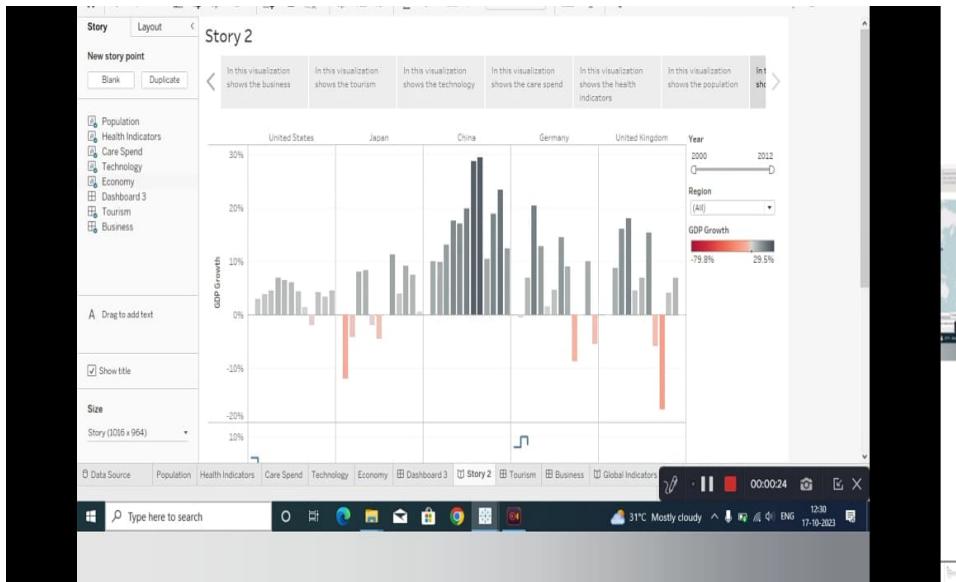
RESULTS:

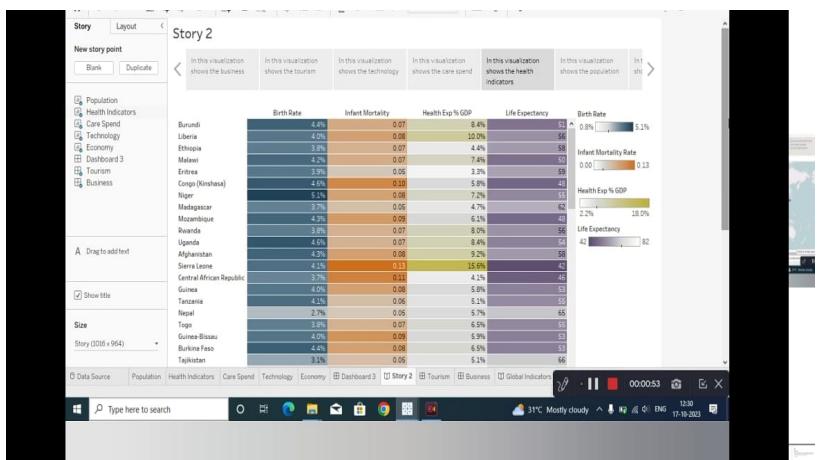
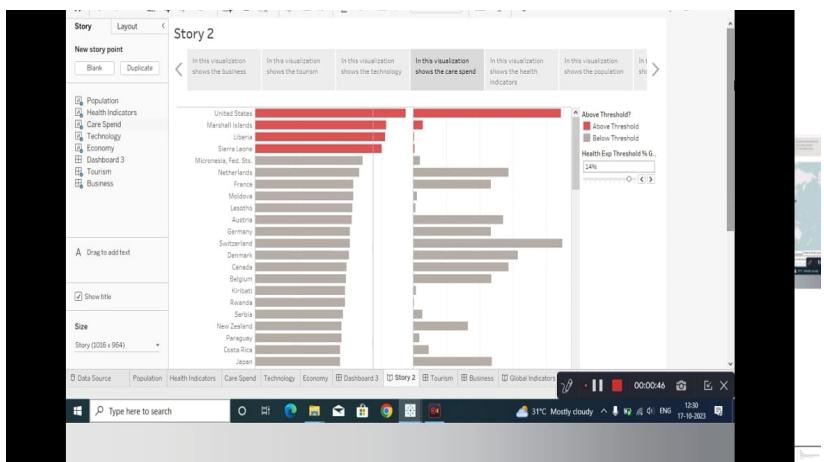
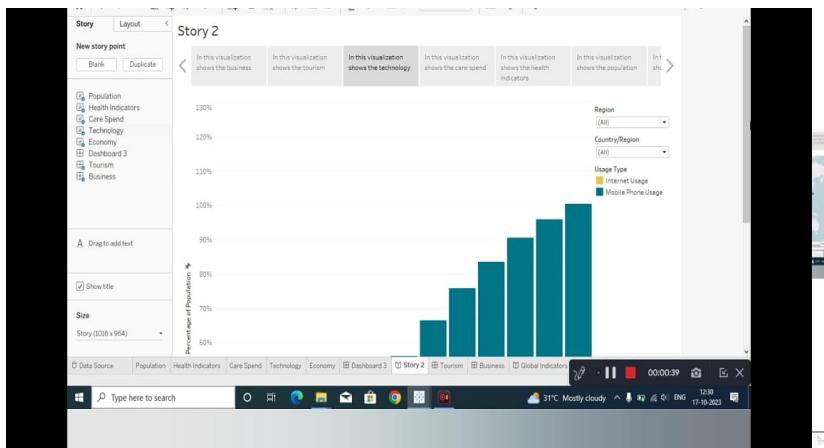


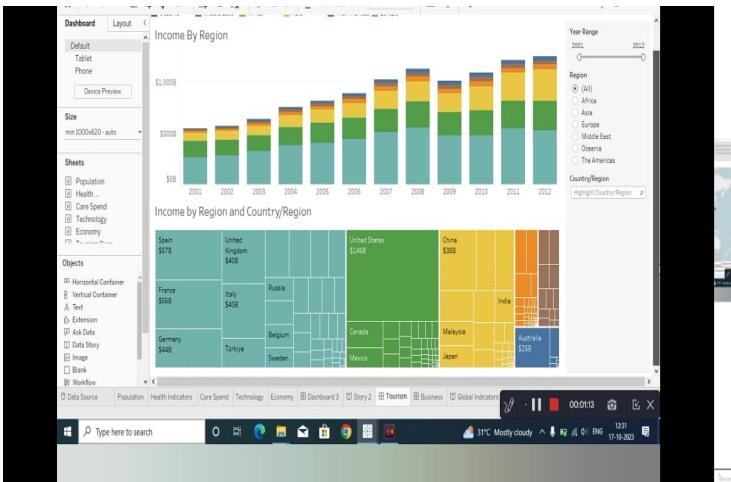
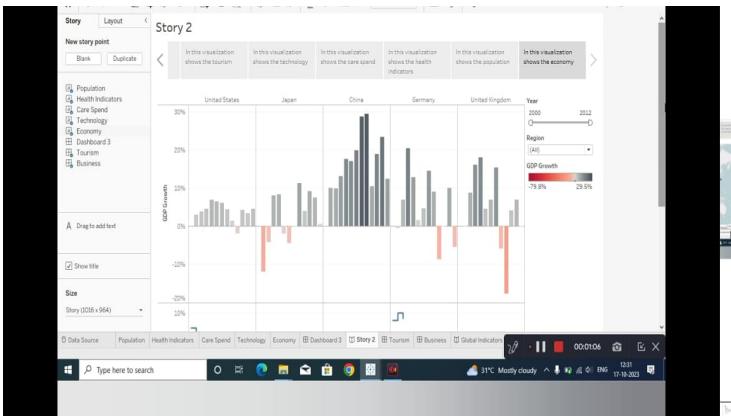
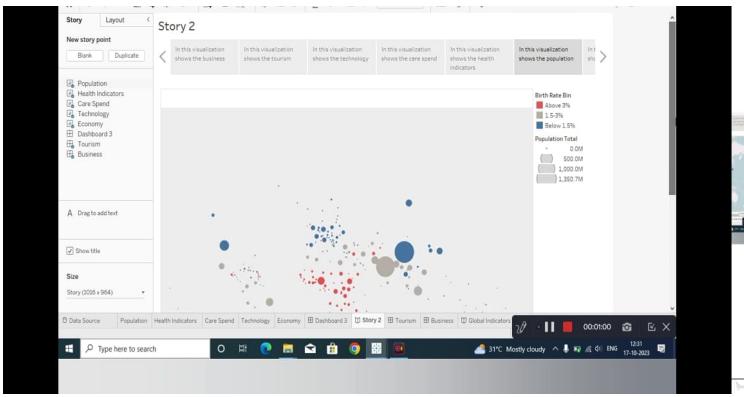


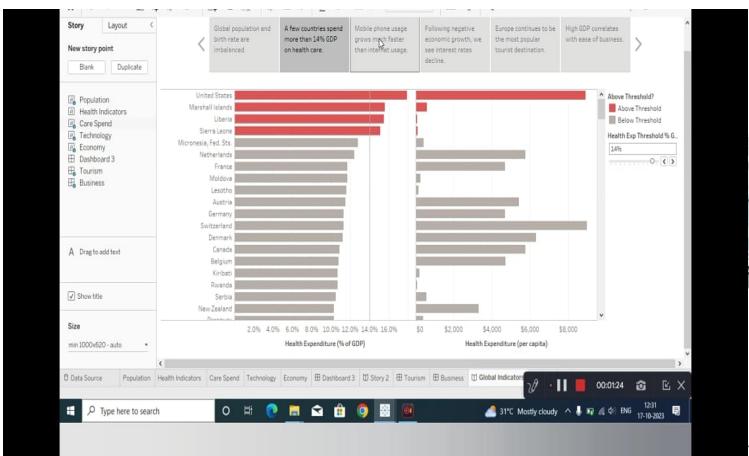
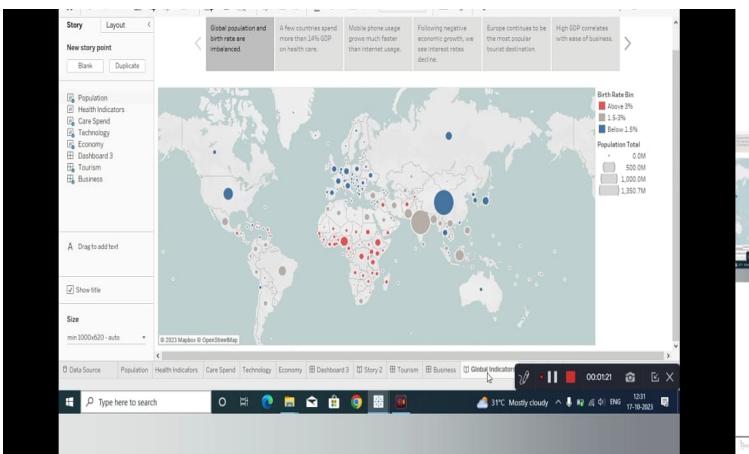


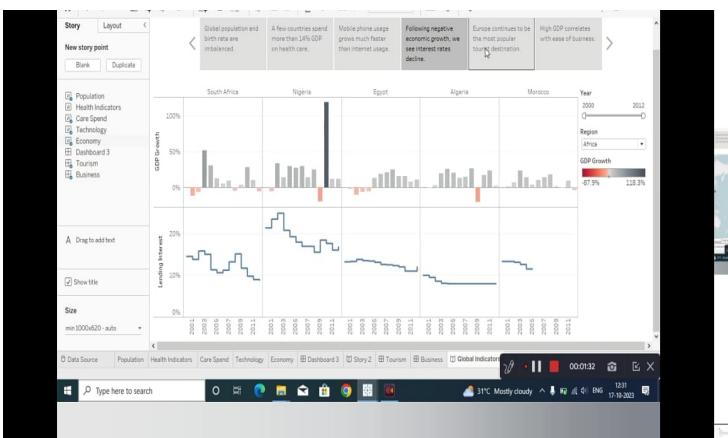
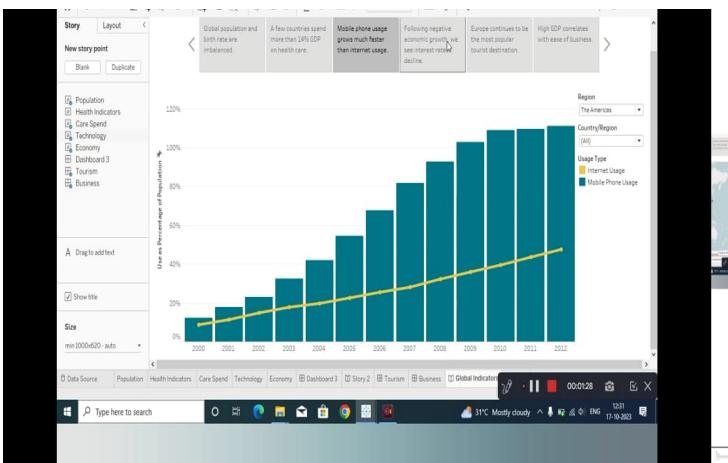


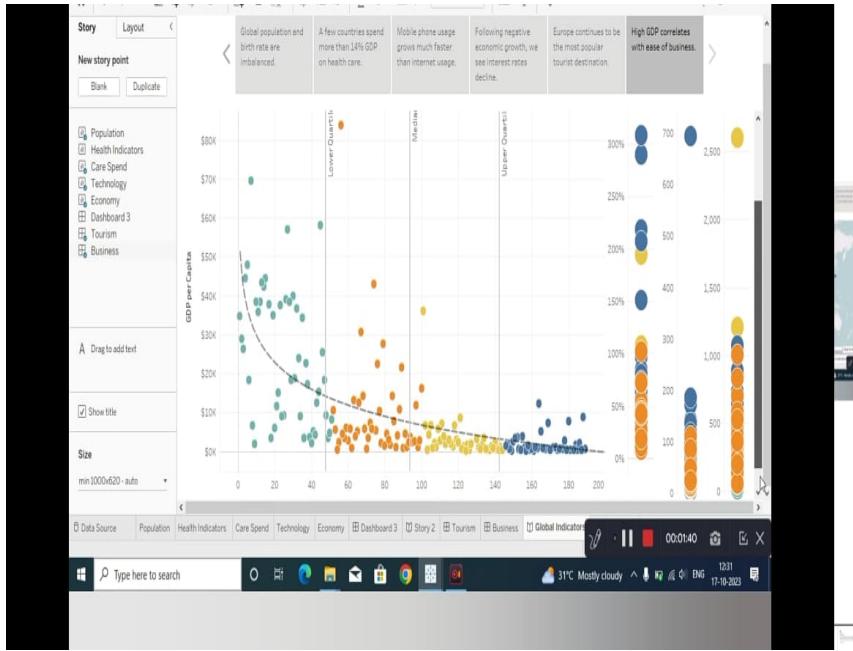












CONCLUSION:

In conclusion, Indian crop production plays a pivotal role in sustaining the nation's food security, economy, and livelihoods,

while facing challenges such as climate change, resource management, and modernization.