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

1) Introduction

1.1) Overview:

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.

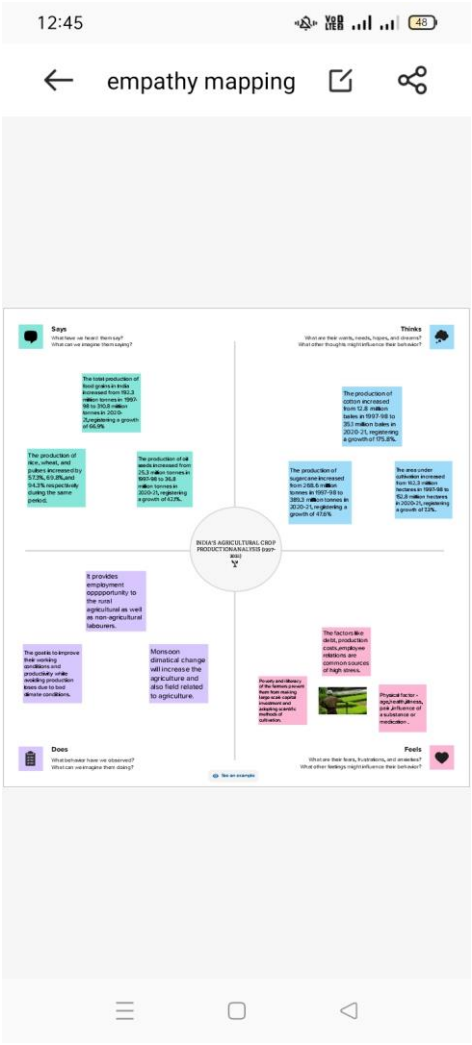
1.2) PURPOSE:

India's foodgrains production touched a record 315.7 million tonnes in 2021-22 despite climate change challenges says the Economic Survey 2022-23 tabled in the Parliament by the Union Minister of Finance and Corporate Affairs Smt. Nirmala Sitharaman here today.

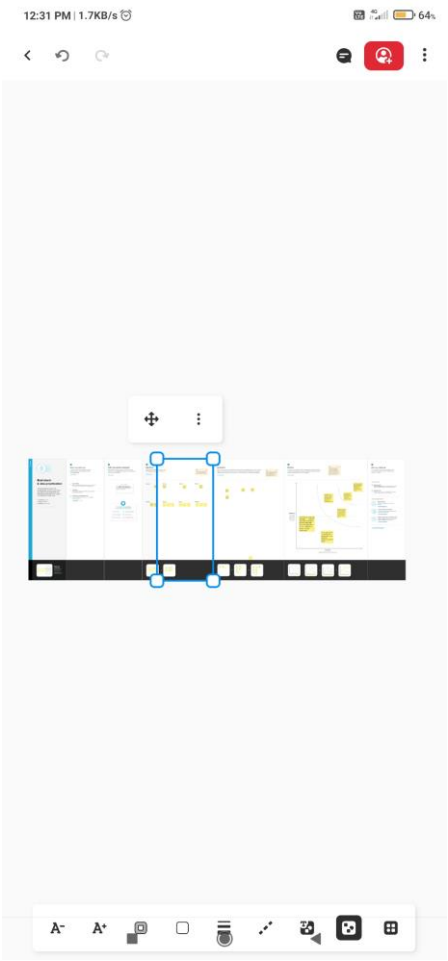
2.)PROBLEM STATEMENT AND DESIGN THINGING:

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.

2.1) EMPATHY MAP:



2.2 IDEATION AND BRAINSTORMING MAP:



3.) RESULT:

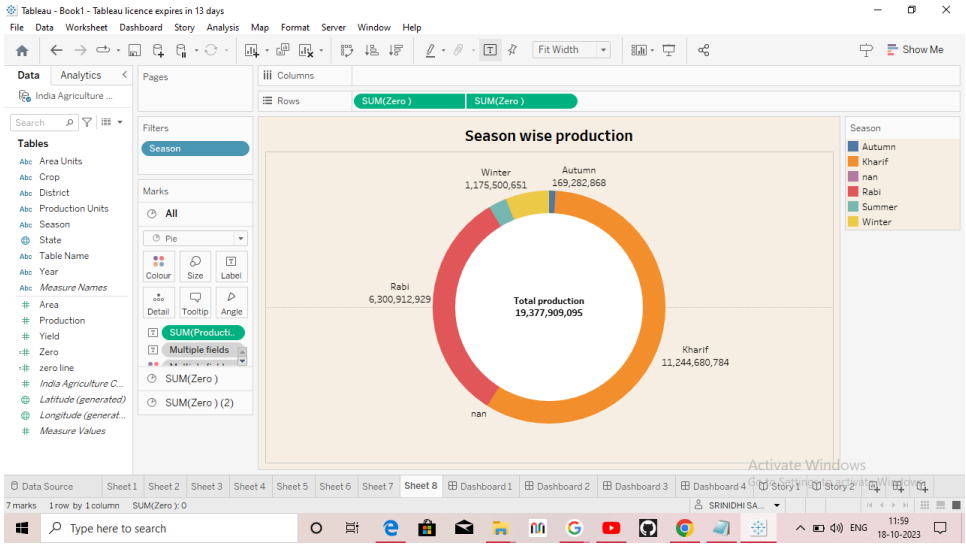
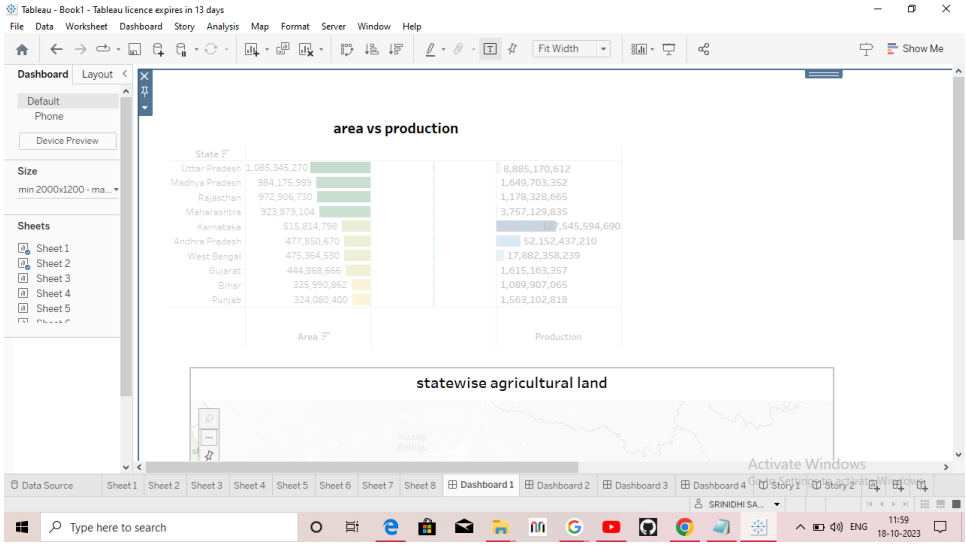


Tableau - Book1 - Tableau licence expires in 13 days
Season wise production
Winter
1,175,500,651
Autumn
169,282,868
Rabi
6,300,912,929
Total production
19,377,909,095
Kharif
11,244,680,784
nan
Season
Autumn
Kharif
nan
Rabi
Summer
Winter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area vs production
statewise agricultural land

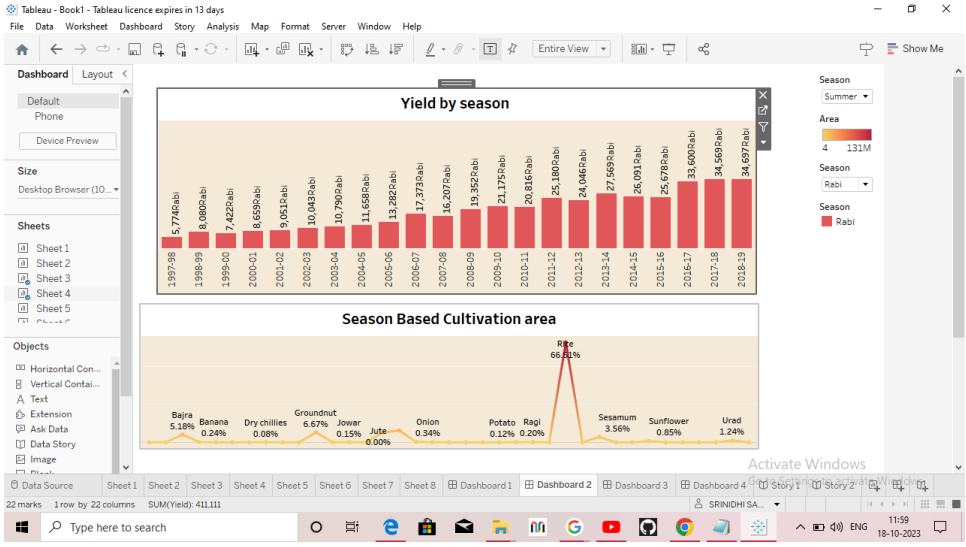
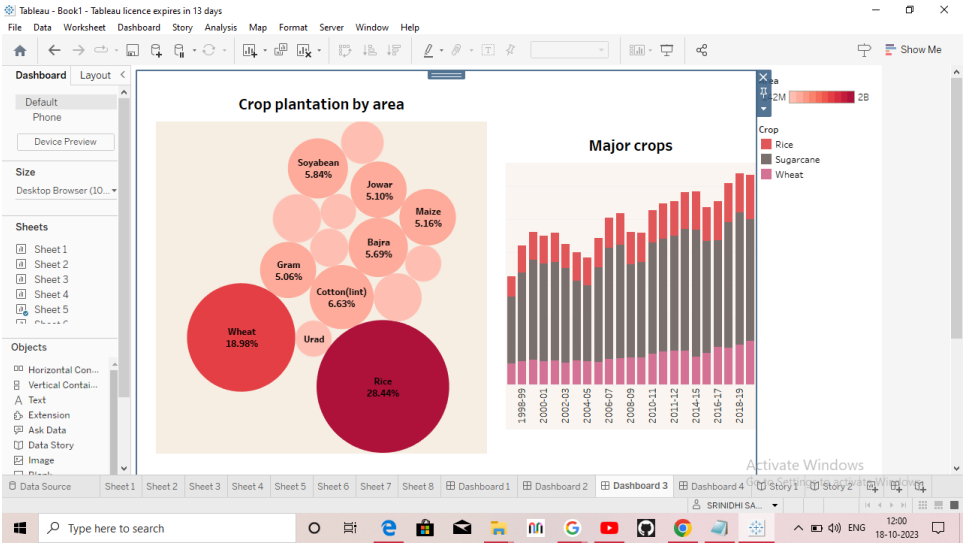


Tableau - Book1 - Tableau licence expires in 13 days
Yield by season
Season Based Cultivation area
Bajra 5.18%
Banana 0.24%
Dry chillies 0.08%
Groundnut 6.67%
Jowar 0.15%
Jute 0.00%
Onion 0.34%
Potato 0.12%
Ragi 0.20%
Rice 66.81%
Sesamum 3.56%
Sunflower 0.85%
Urad 1.24%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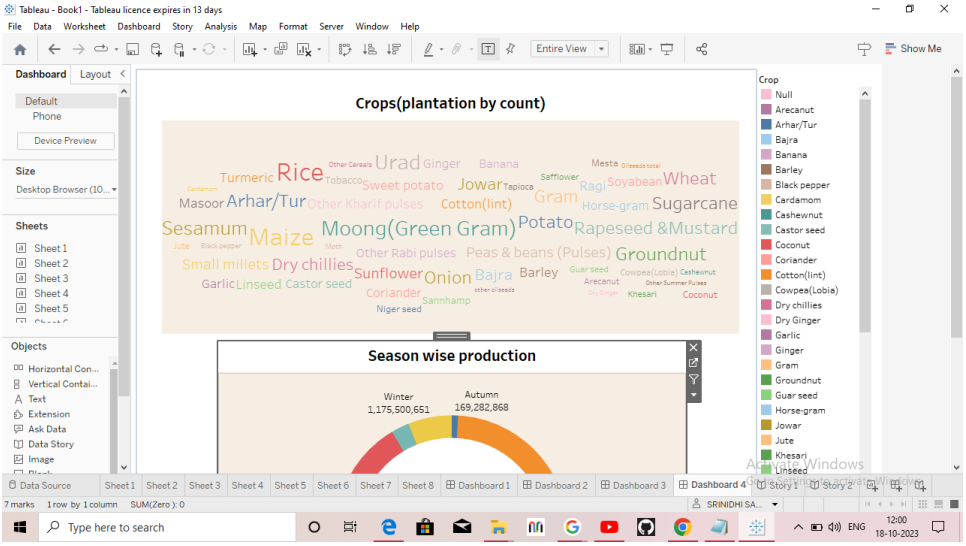
Crop plantation by area
Soyabean 5.84%
Jowar 5.10%
Maize 5.16%
Bajra 5.69%
Gram 5.06%
Cotton(lint) 6.63%
Wheat 18.98%
Urad
Rice 28.44%
Major crops
Crop
Rice
Sugarcane
Wheat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Crops(plantation by count)
Season wise production
Winter 1,175,500,651
Autumn 169,282,868
Crop
Null
Arecanut
Arhar/Tur
Bajra
Banana
Barley
Black pepper
Cardamom
Cashewnut
Castor seed
Coconut
Coriander
Cotton(lint)
Cowpea(Lobia)
Dry chillies
Dry Ginger
Garlic
Ginger
Gram
Groundnut
Guar seed
Horse-gram
Jowar
Jute
Khesari
Linseed

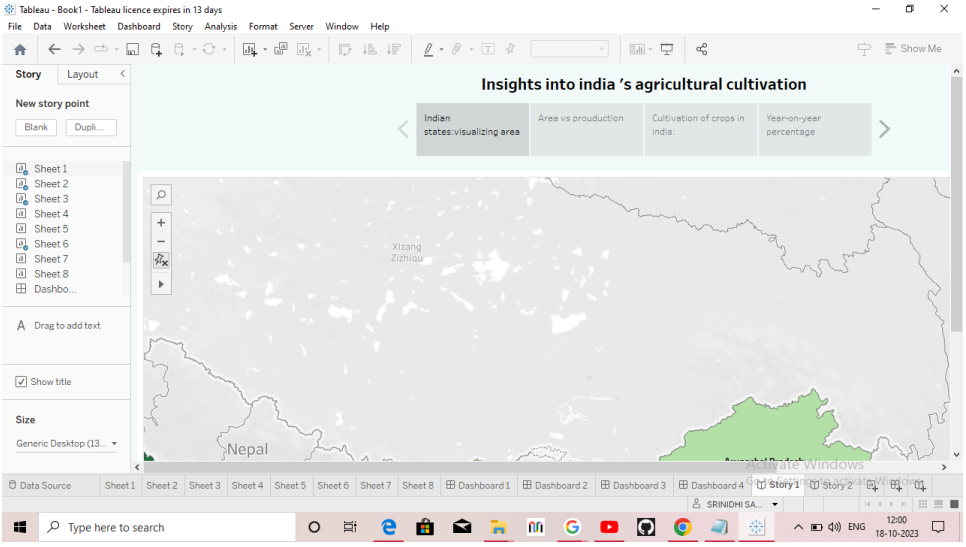
Tableau - Book1 - Tableau licence expires in 13 days
Insights into india 's agricultural cultivation
Indian states visualizing area
Area vs prouduction
Cultivation of crops in india:
Year-on-year percentage
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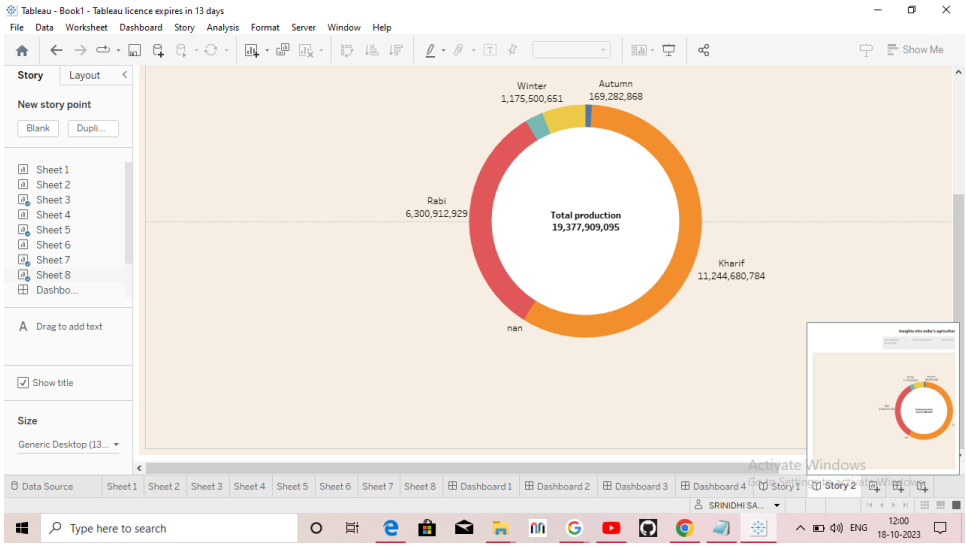
Nepal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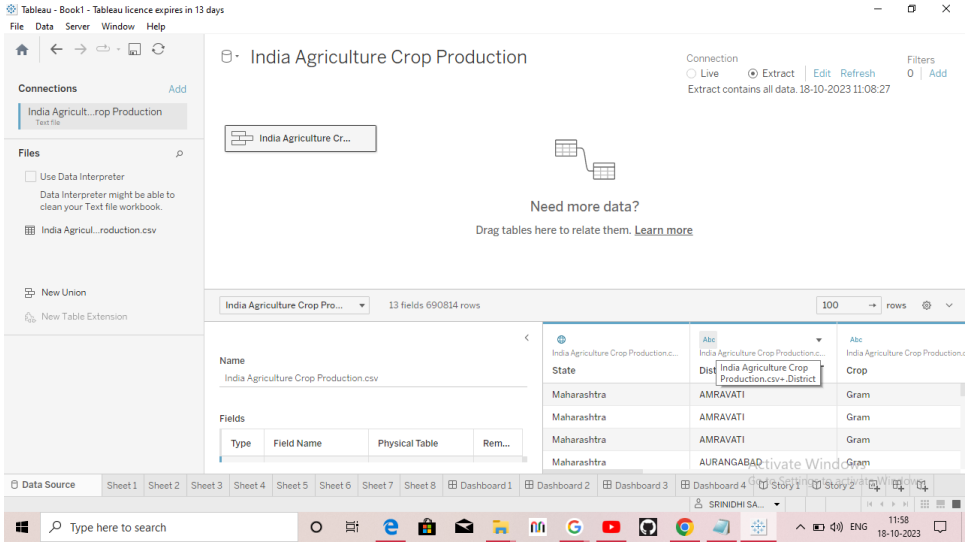
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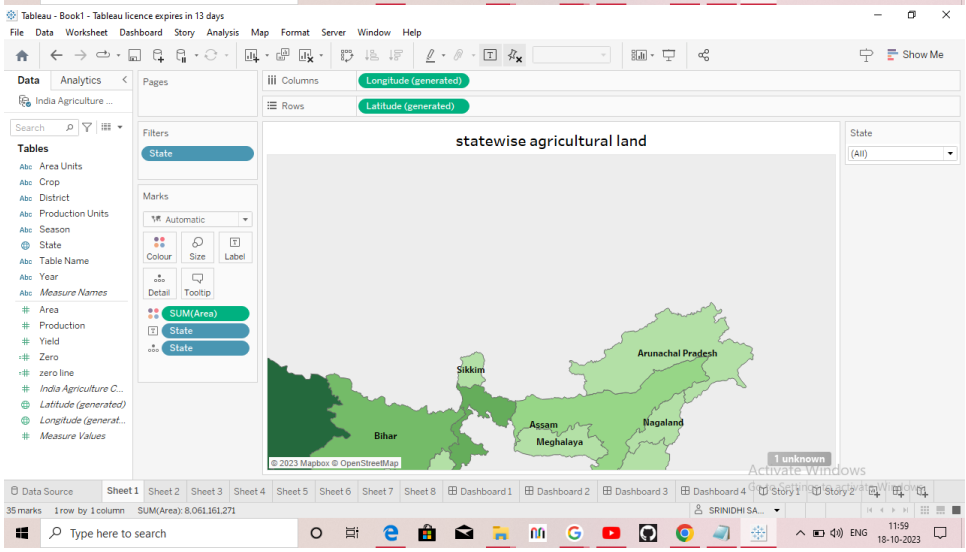
India Agriculture Crop Production
Need more data?
Drag tables here to relate them. Learn more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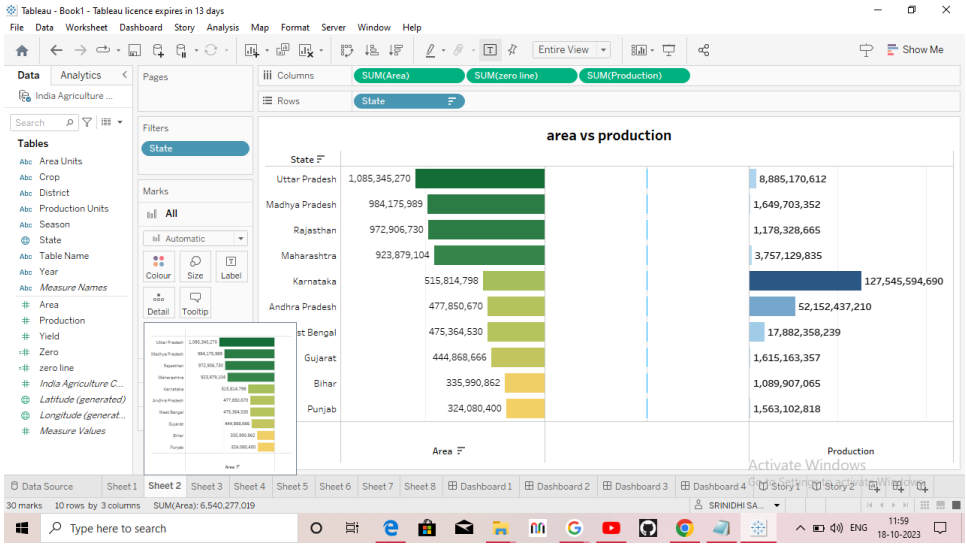
statewise agricultural land
Sikkim
Arunachal Pradesh
Bihar
Assam
Meghalaya
Nagaland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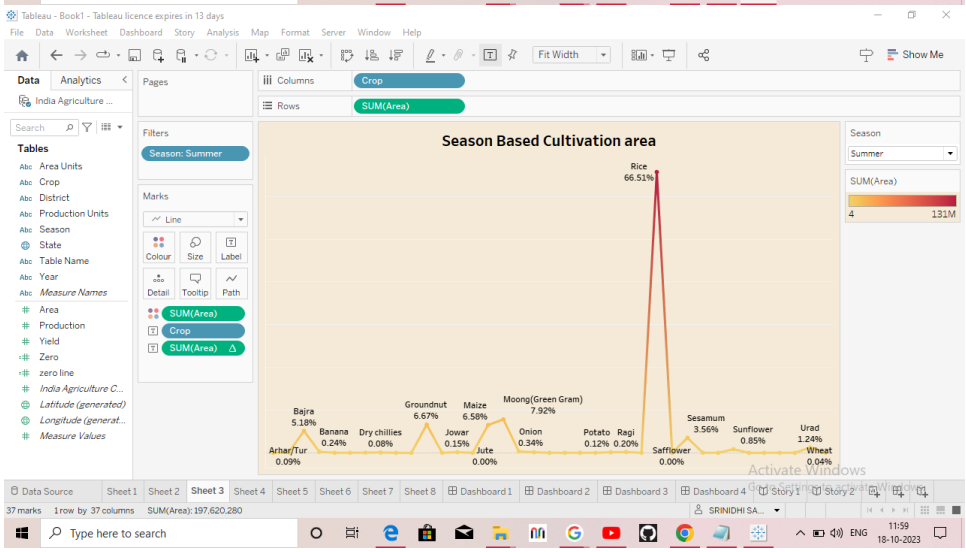
area vs production
State
Uttar Pradesh 1,085,345,270 8,885,170,612
Madhya Pradesh 984,175,989 1,649,703,352
Rajasthan 972,906,730 1,178,328,665
Maharashtra 923,879,104 3,757,129,835
Karnataka 515,814,798 127,545,594,690
Andhra Pradesh 477,850,670 52,152,437,210
st Bengal 475,364,530 17,882,358,239
Gujarat 444,868,666 1,615,163,357
Bihar 335,990,862 1,089,907,065
Punjab 324,080,400 1,563,102,818
Area
Production
Activate Windows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Season Based Cultivation area
Rice 66.51%
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Arhar/Tur 0.09%
Banana 0.24%
Dry chillies 0.08%
Groundnut 6.67%
Jowar 0.15%
Maize 6.58%
Jute 0.00%
Moong(Green Gram) 7.92%
Onion 0.34%
Potato 0.12%
Ragi 0.20%
Safflower 0.00%
Sesamum 3.56%
Sunflower 0.85%
Urad 1.24%
Wheat 0.04%
Season
Summer
SUM(Area)
4
131M
Activate Windows

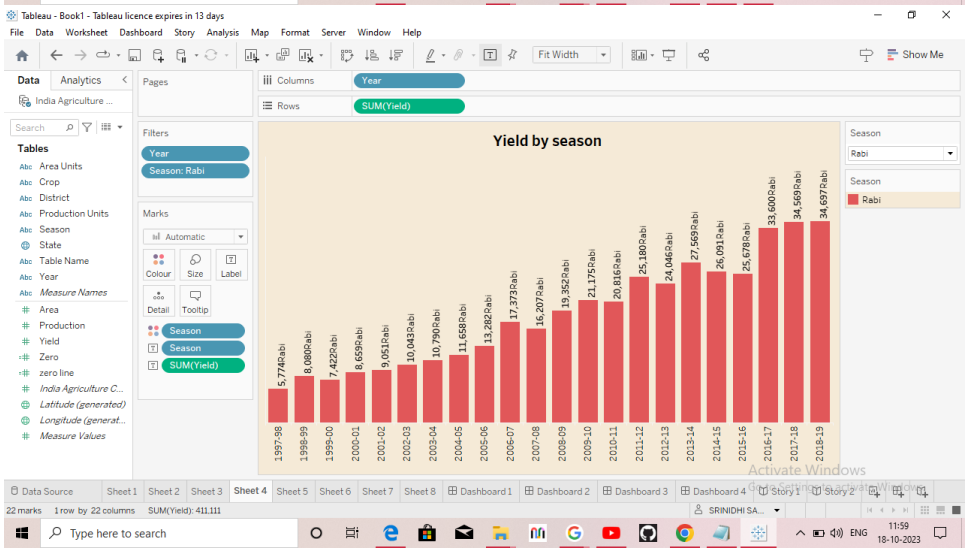
Tableau - Book1 - Tableau licence expires in 13 days
Yield by season
5,774Rabi
8,080Rabi
7,422Rabi
8,659Rabi
9,051Rabi
10,043Rabi
10,790Rabi
11,658Rabi
13,282Rabi
17,373Rabi
16,207Rabi
19,352Rabi
21,175Rabi
20,816Rabi
25,180Rabi
24,046Rabi
27,569Rabi
26,091Rabi
25,678Rabi
33,600Rabi
34,569Rabi
34,697Rabi
1997-98
1998-99
1999-00
2000-01
2001-02
2002-03
2003-04
2004-05
2005-06
2006-07
2007-08
2008-09
2009-10
2010-11
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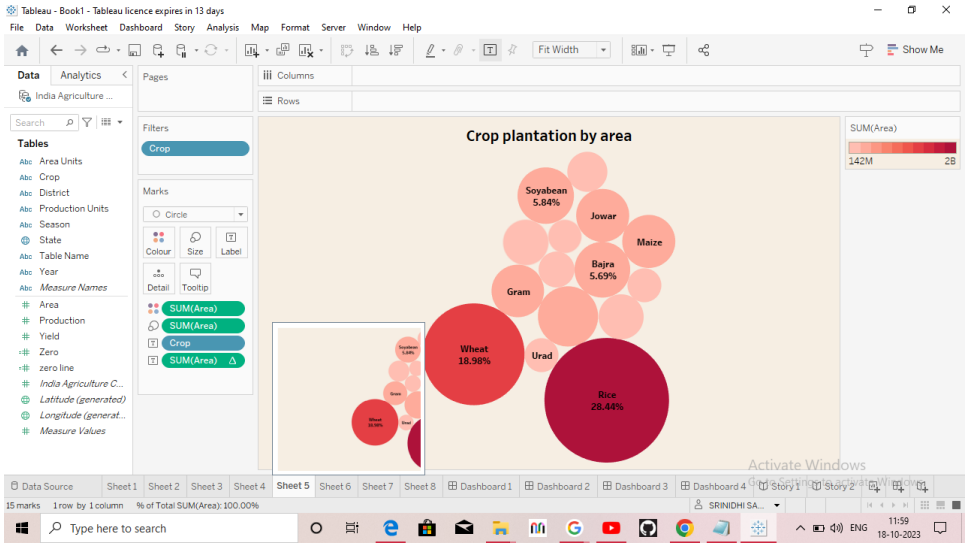
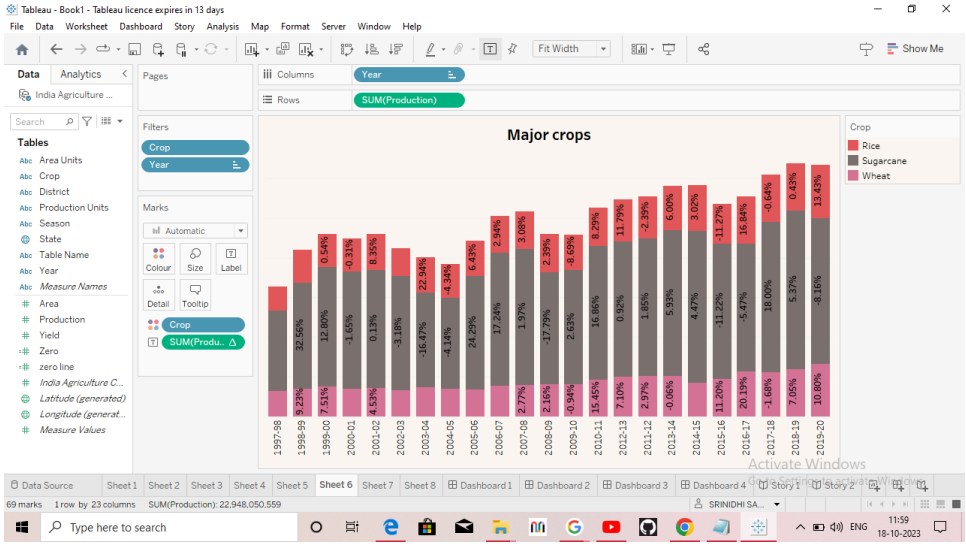
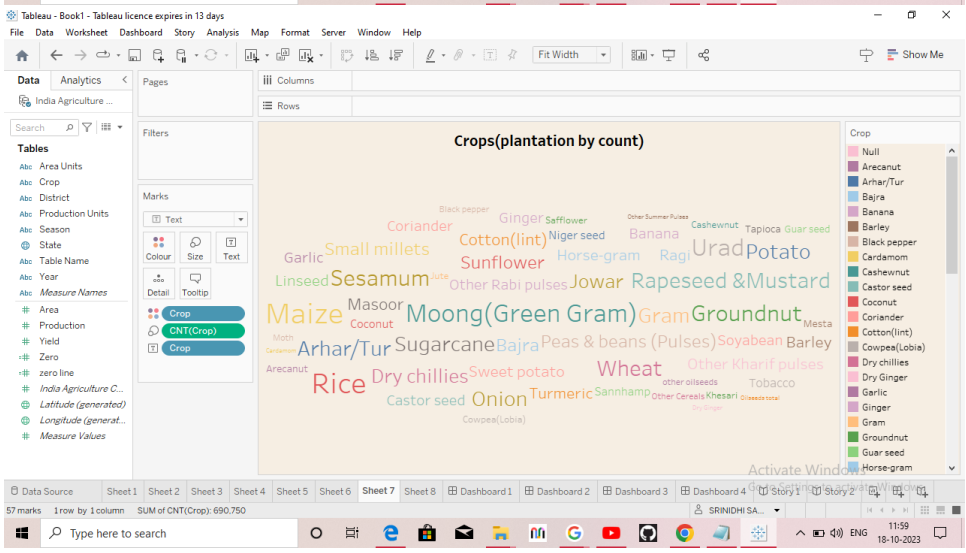
2013-14
2014-15
2015-16
2016-17
2017-18
2018-19
Season
Rabi
Activate Windows







4>) ADVANTAGES AND DISADVANTAGES:

What are the problems of agriculture in India Analyse?

The present challenges that plague Indian agriculture are limited knowledge and insufficient infrastructure, especially in the rural areas. Problems related to lack of infrastructure, such as irrigation, market and transport, add huge costs to farmers' operations. In addition, there are no proper delivery systems.

What is the disadvantage of agriculture in India?

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.) APPLICATION:

Agricultural output has been volatile over the past 10 years, with annual growth ranging from 8.6% in 2010-11, to -0.2% in 2014-15 and 0.8% in 2015-16. [2] Figure 3 shows the trend in the growth of agricultural sector over the past 10 years.

6.) CONCLUSION:

Agriculture remains the largest contributor to the country's GDP and farmers constitute 58% of India's population. It means much of India remains untouched by the mindlessness of consumerism. Under its Agriculture Export Policy, the Government of India aims to increase agricultural export by over $60 billion by 2022.

7.) FUTURE SCOPE:

Yes, agriculture is good for the future as it is expected to use advanced technologies and innovations to produce more food with limited land and resources, increase efficiency on farms, and

become more profitable, efficient, safe, and environment friendly.