

NAAN MUDHALVAN SKILL DEVELOPMENT
PROJECT
India's Agricultural Crop Production Analysis
(1997-2021)

III~ BSC MATHEMATICS
A.A Government Arts College, Musiri
(Affiliated by Bharathidasan University, Tiruchirapalli)



By,

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NM2023TMID08233

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INDIA'S AGRICULTURE CROP PRODUCTION

ANALYSIS (1997-2021)

Introduction:

Agriculture has been the backbone of the Indian economy and it will continue to remain so for a long time. India ranks second worldwide in farm outputs. Indian farmers, thus produced about 71 kilograms of wheat and 80 kilograms of rice for every member of Indian population in 2011. Making it the seventh largest agricultural exporter worldwide, and the sixth largest net exporter.

India has shown a steady average nationwide annual increase in the mass-produced per hectare for some agricultural items, over the last 60 years. These gains have come mainly from India's Green Revolution. With agricultural policy success in wheat, India's Green Revolution technology spread to rice. Agricultural scientist MS Swaminathan has played a vital role in the green revolution. By 2000, Indian farms were adopting wheat varieties capable of yielding 6 tonnes of wheat per hectare.

REFERENCES:

- ❖ Chakravarti A, Joshi N, Panjiar H. Rainfall runoff analysis using artificial neural network. Indian Journal of Science and Technology. 2015 Jul; 8(14):1–7.
- ❖ Khoshnevisan B, Shahin Rafiee S, Omid M, Mousazadeh H, Rajaeifar MA. Application of artificial neural networks for prediction of output energy and GHG emissions in potato production in Iran, Elsevier. Agricultural Systems. 2014; 123:120–7.
- ❖ Baskar SS, Arockiam L, Arul Kumar V, Jeyasimman L. Brief survey of application of data mining techniques to agriculture. Agricultural Journal. 2010; 5(2):116–8.
- ❖ Delgado G, Aranda V, Calero J, Sanchez-Maranon M, Serrano J M, Sanchez D, Vila MA. Building a fuzzy logic information network and a decision-support system for olive cultivation in Andalusia. Spanish Journal of Agricultural Research. 2008; 6(2):252–63.
- ❖ Kumar AVTV, Rajini Kanth R. A data mining approach for the estimation of climate change on the jowar crop yield in India. International Journal of Emerging Science and Engineering (IJESE). 2013; 2(2):16–20.

Milestone 1:

Define a Problem \ Problem Understanding

Activity 1: Specify the Problem:

- The production may be less due to draught and Quality of seeds used for cultivation.
- Small and fragmented landholdings, a lack of mechanisation, soil erosion, agricultural marketing, and insufficient storage facilities are the main problems in Indian agriculture.

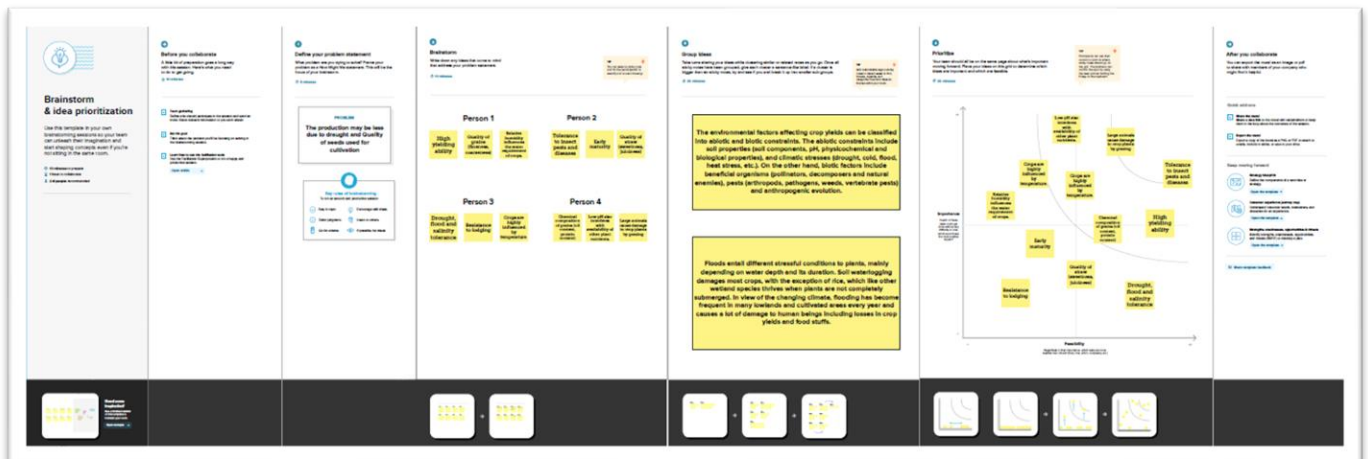
Activity 2:

UNDERSTANDING THE PROBLEM

❖ Empathy Map



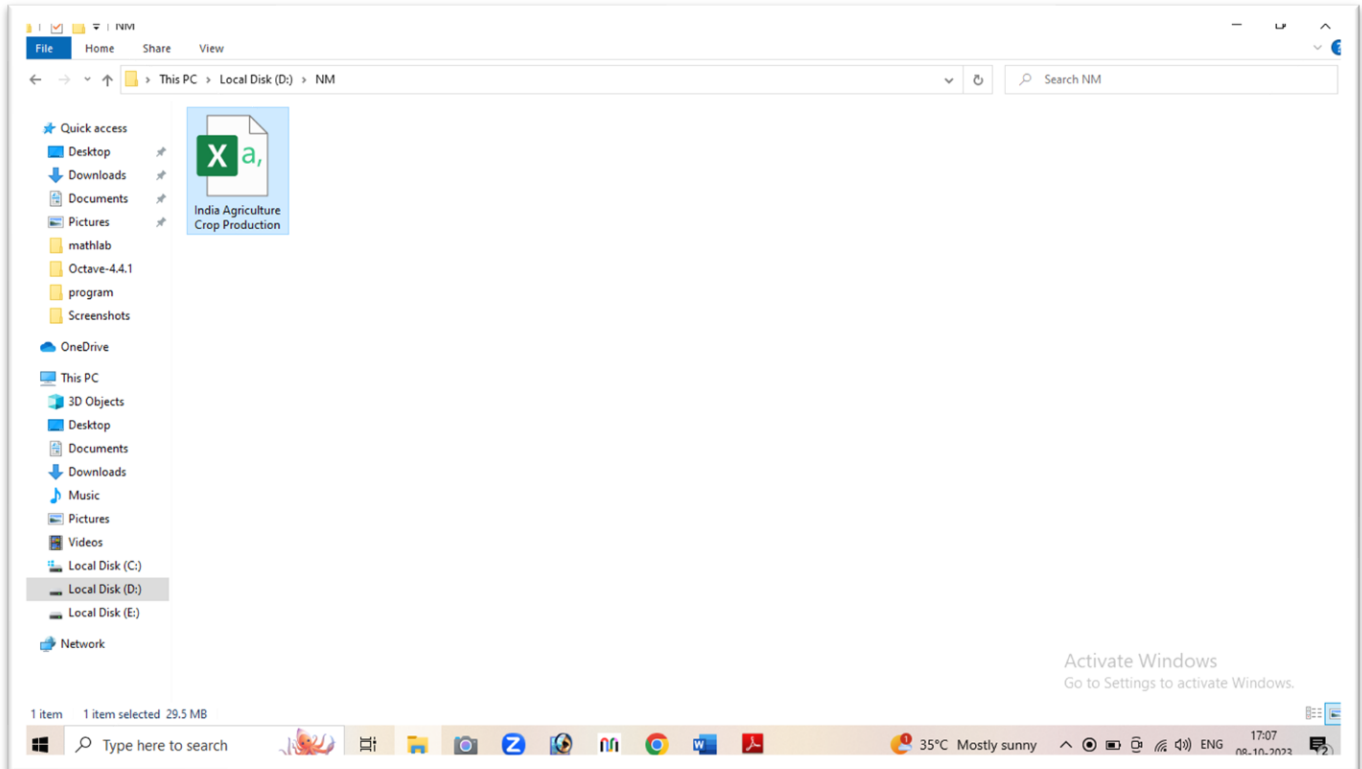
❖ BrainStorming



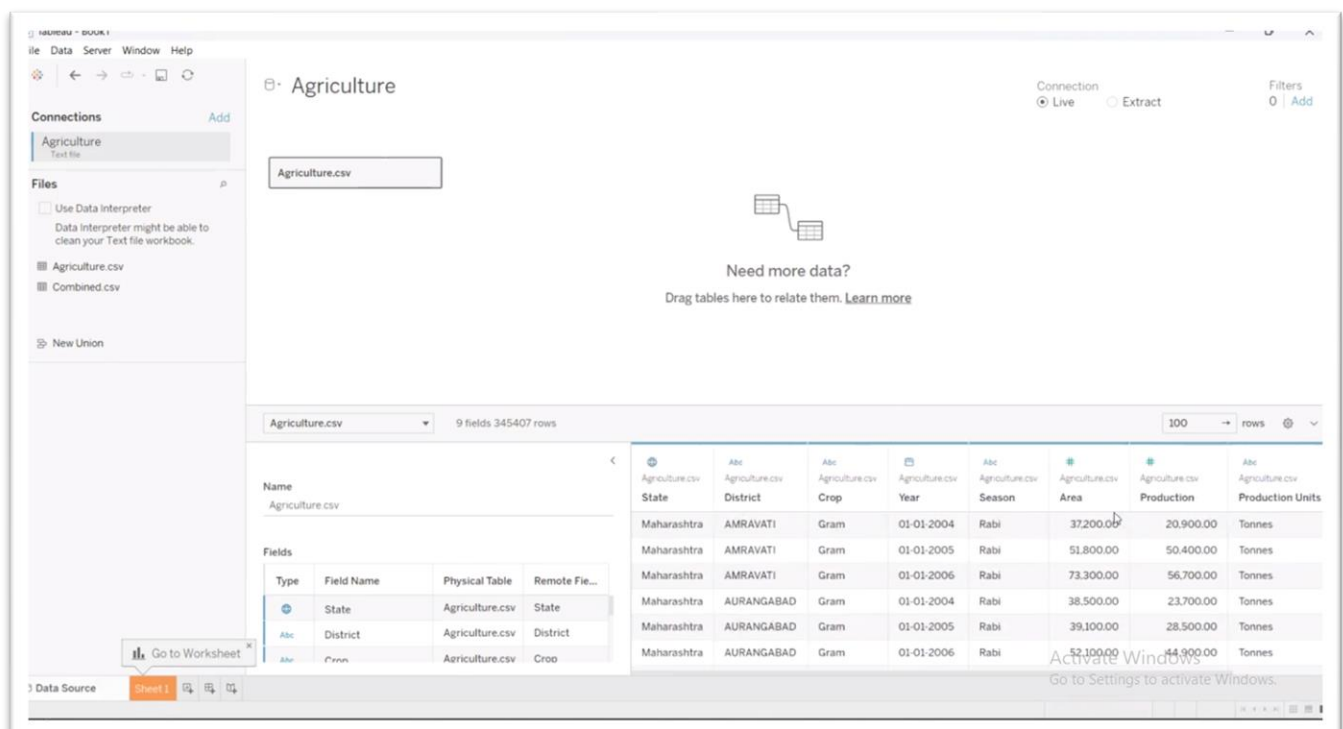
Milestone 2:

Data Collection & Extraction

Activity 1: Collect the Dataset



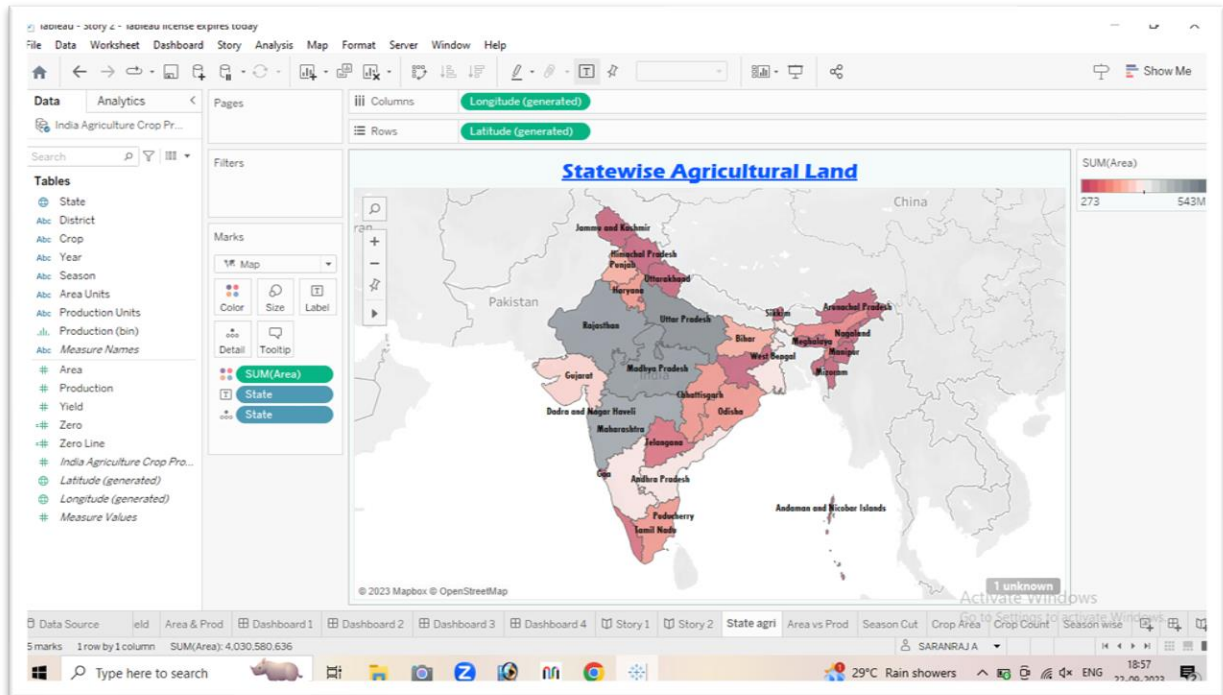
Activity 2: Connect the Dataset with Tablue



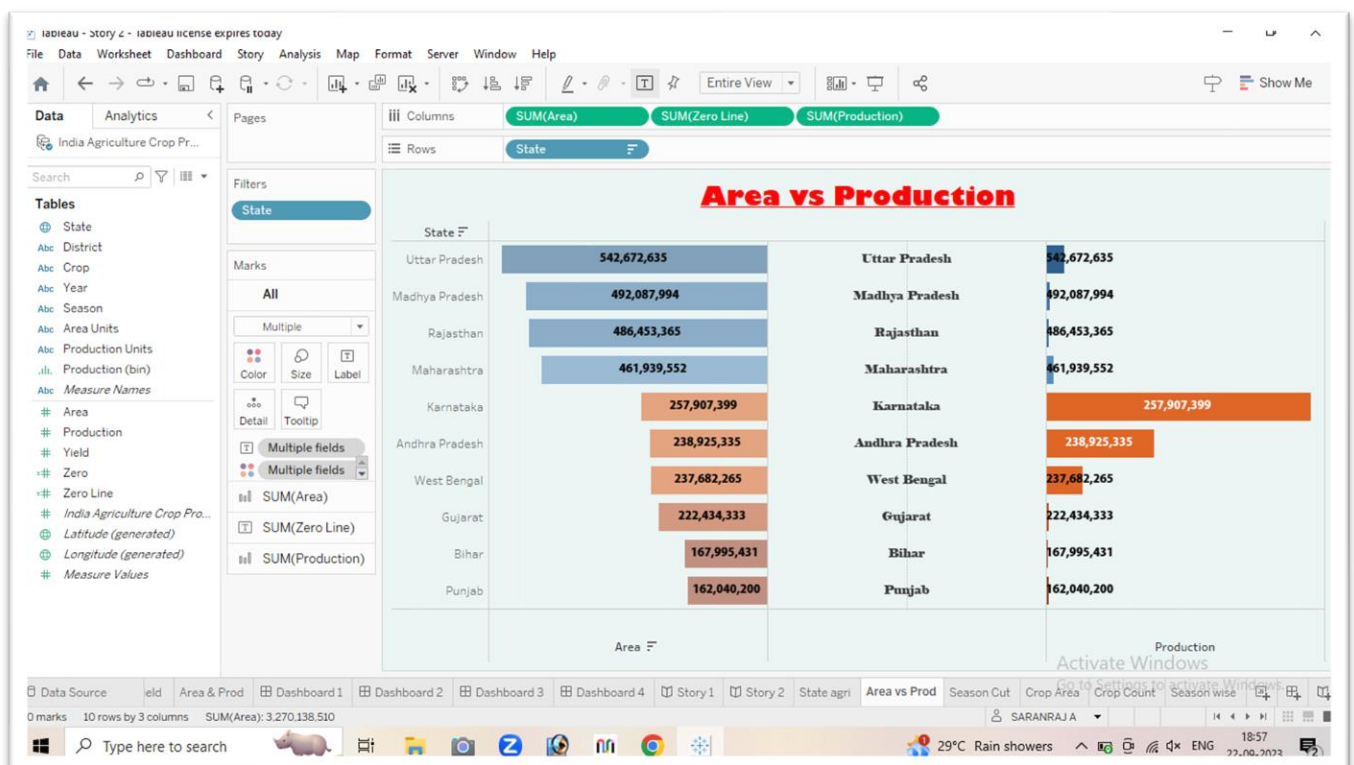
Milestone 3:

Data Visualization

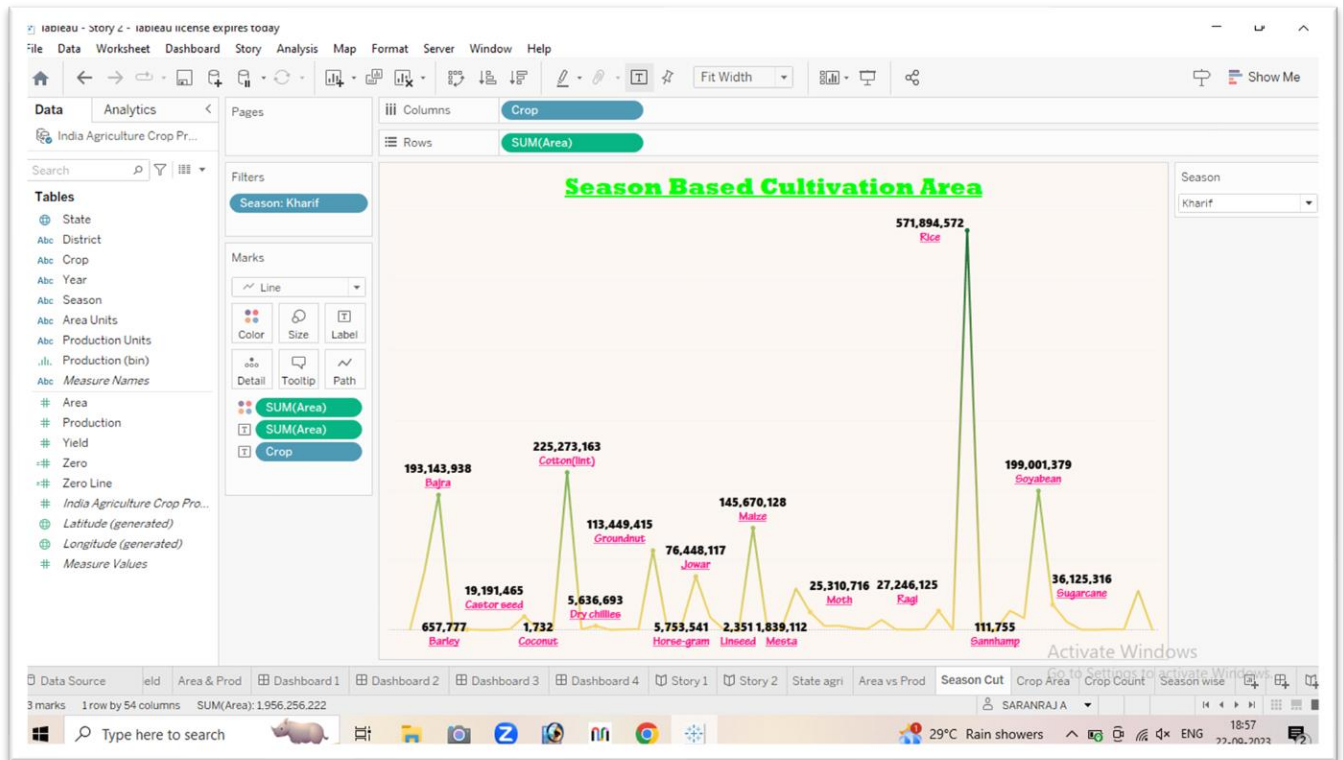
Activity 1: State wise Agriculture Land



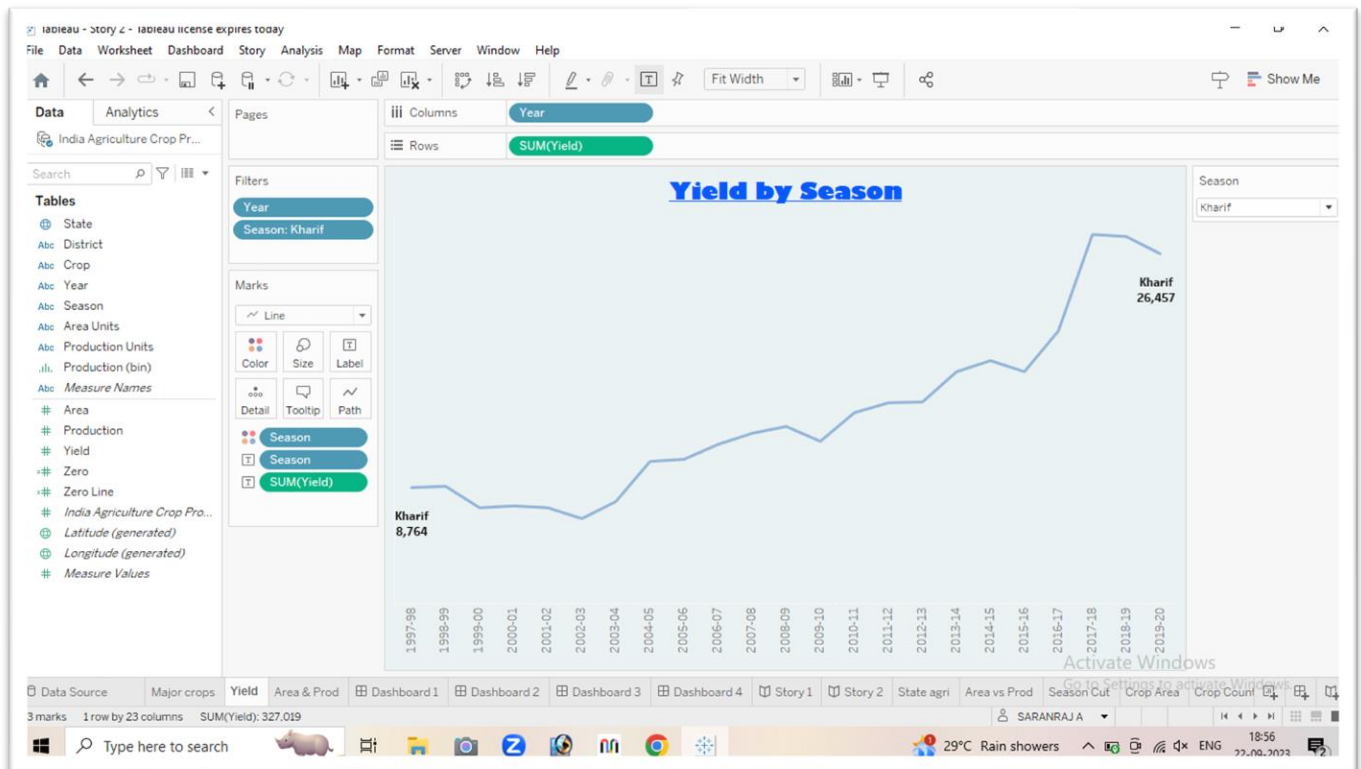
Activity 2: Area vs Production



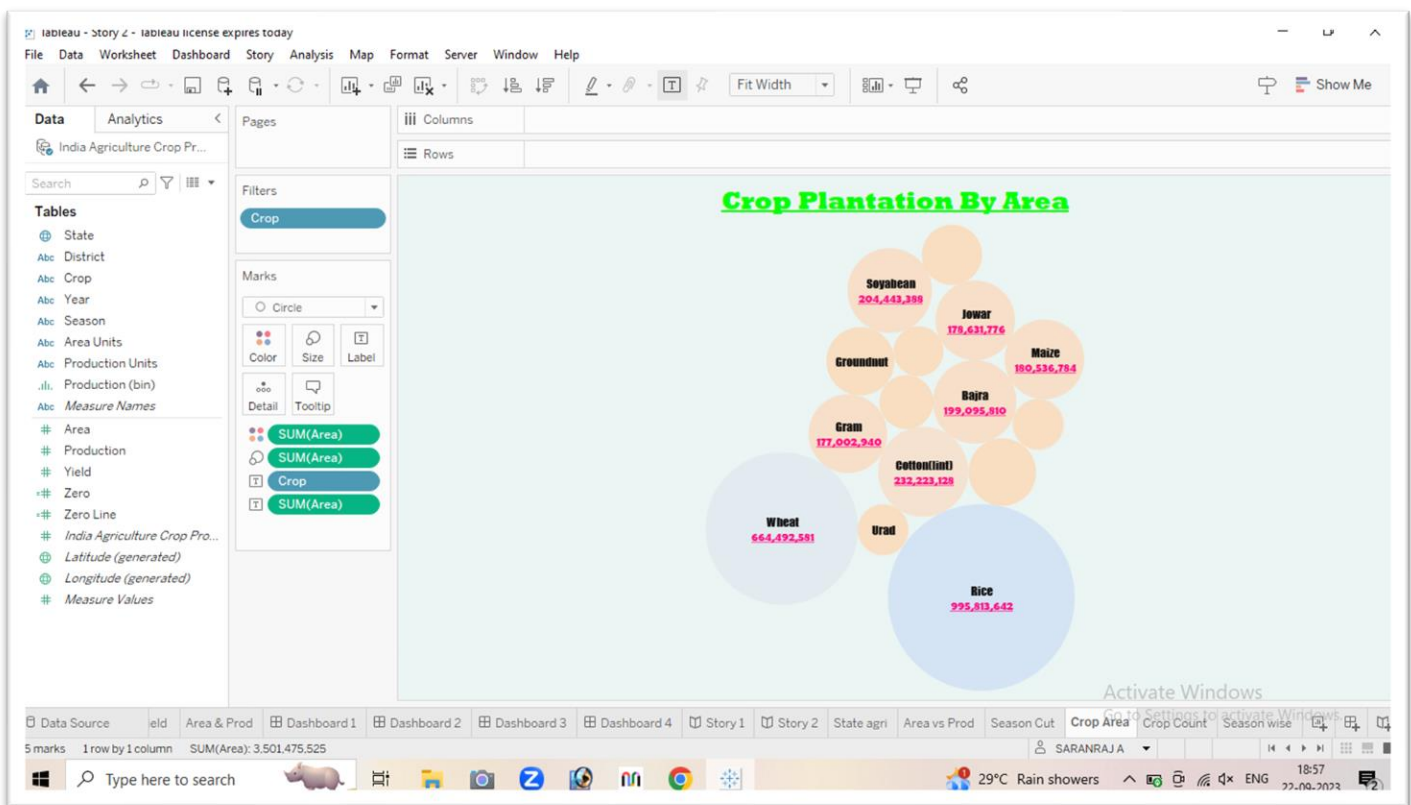
Activity 3: Season Based Cultivation



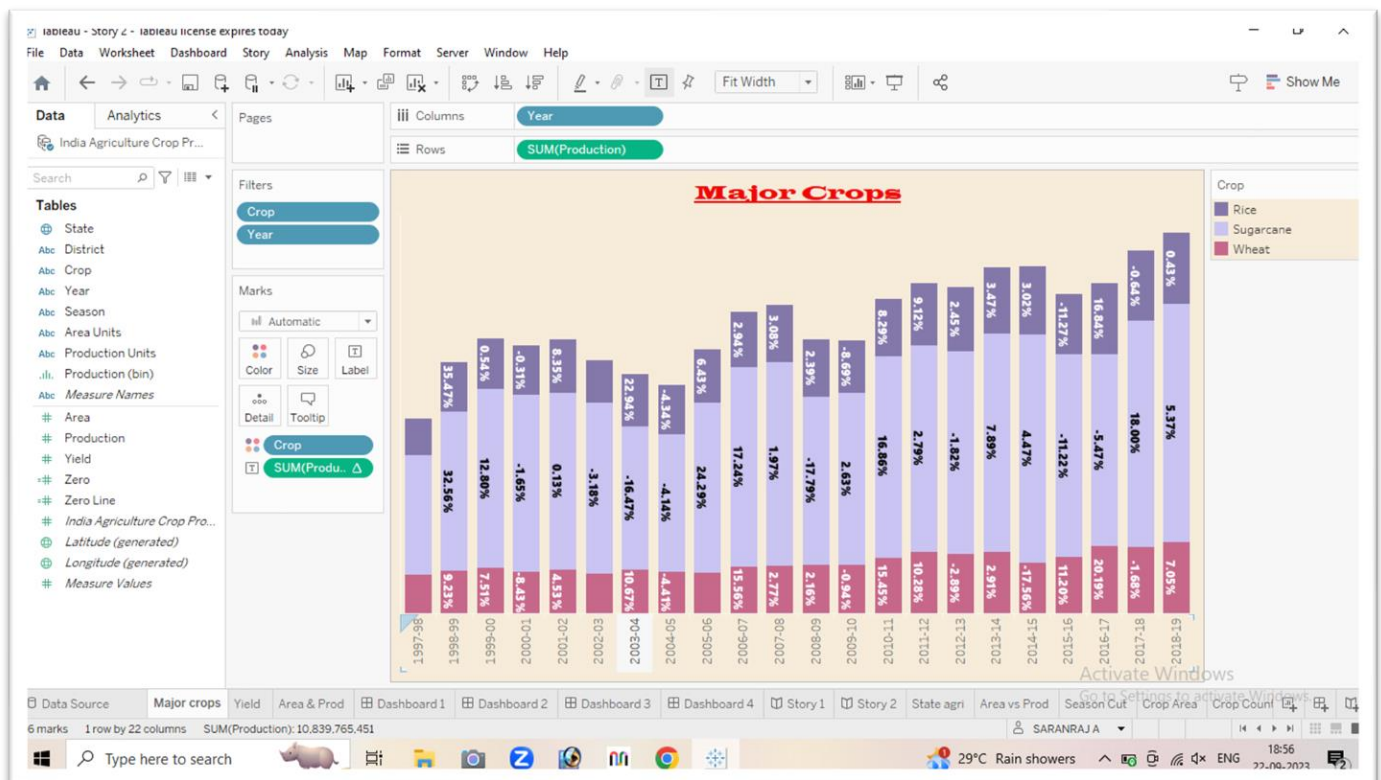
Activity 4: Yield by Season



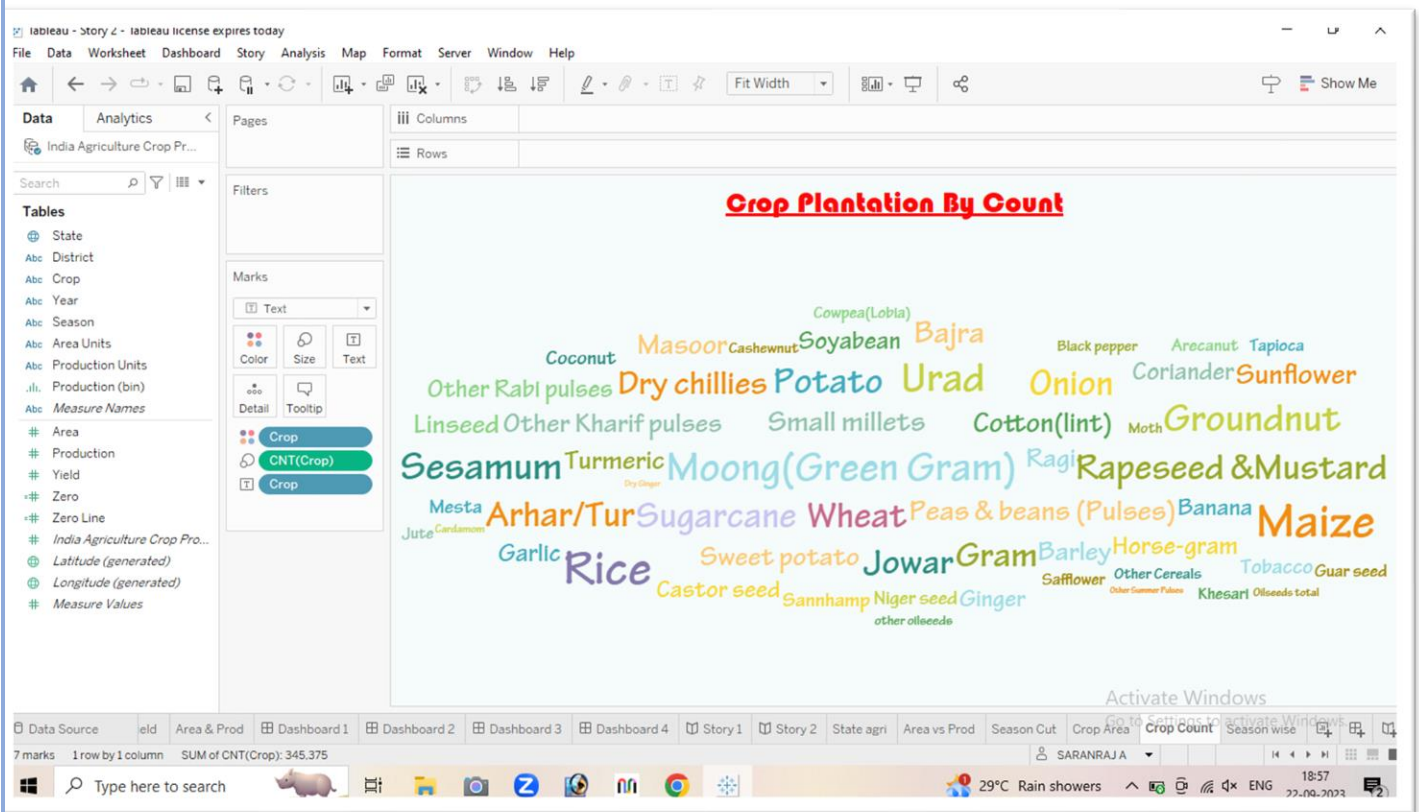
Activity 5: Crop Plantation by Area



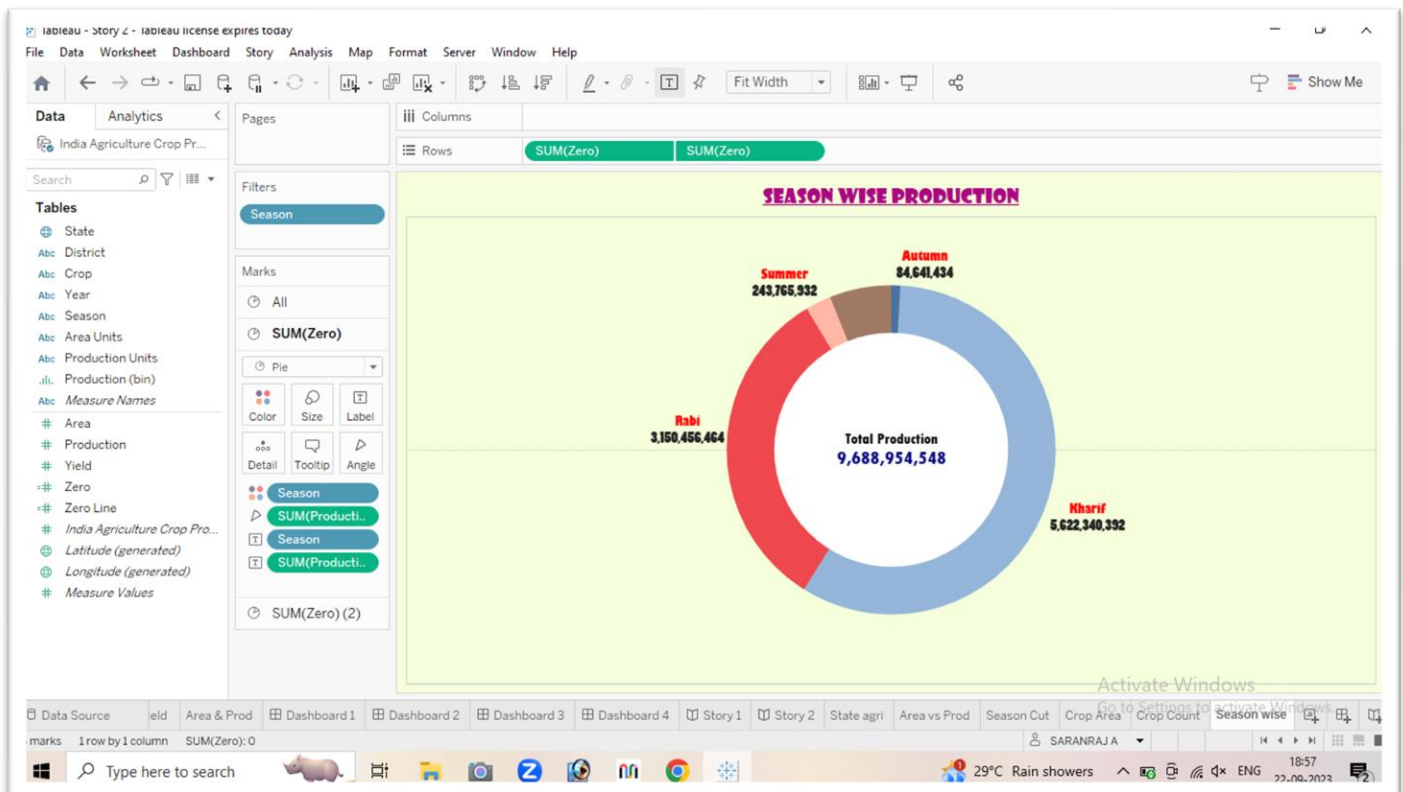
Activity 6: Major Crops Growth YOY



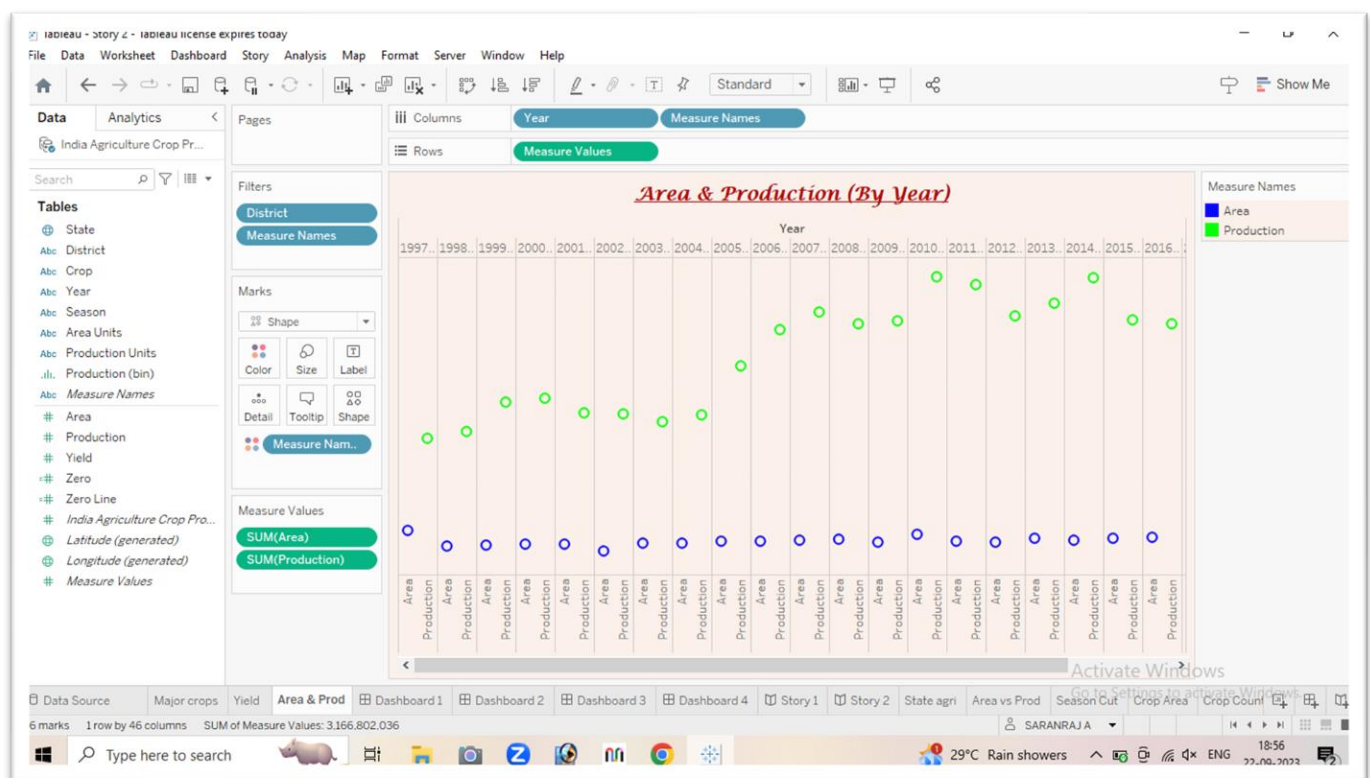
Activity 7: Crop Plantation by Count



Activity 8: Season wise Production



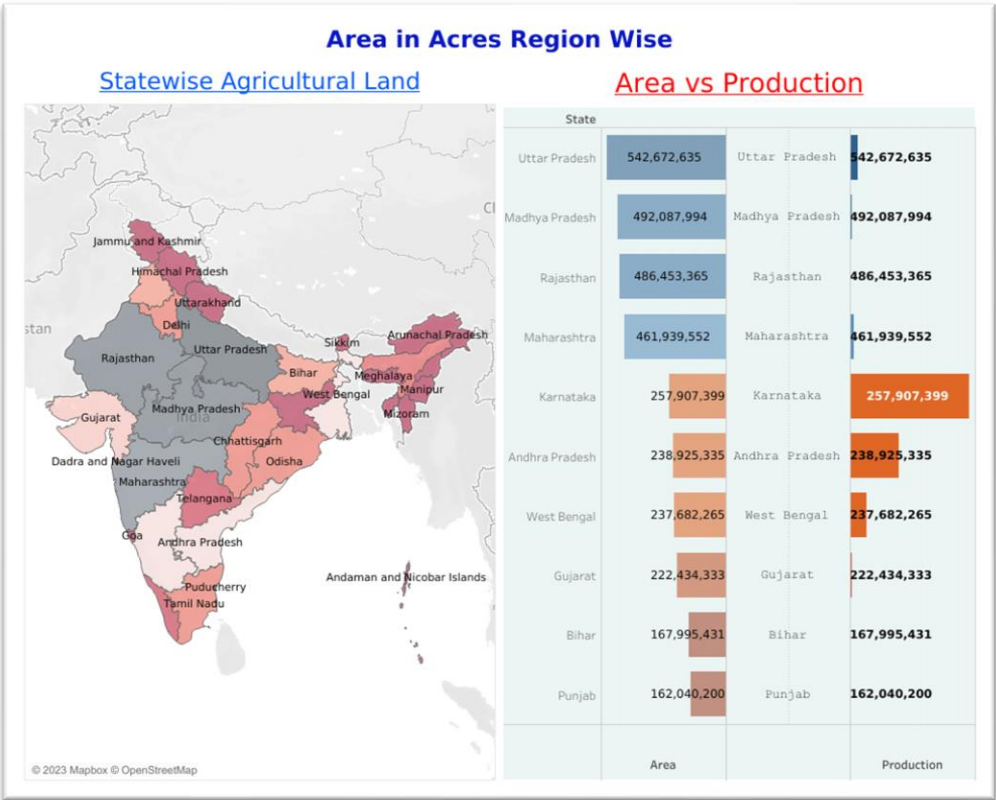
Activity 9: Area & Production (By Year)



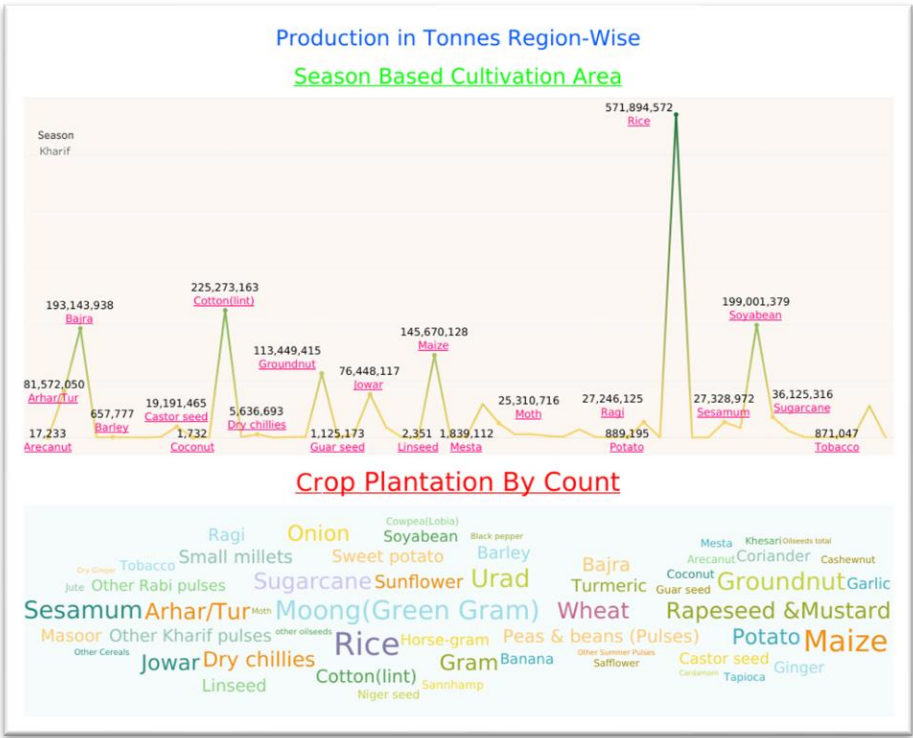
Milestone 3:

Dashboard

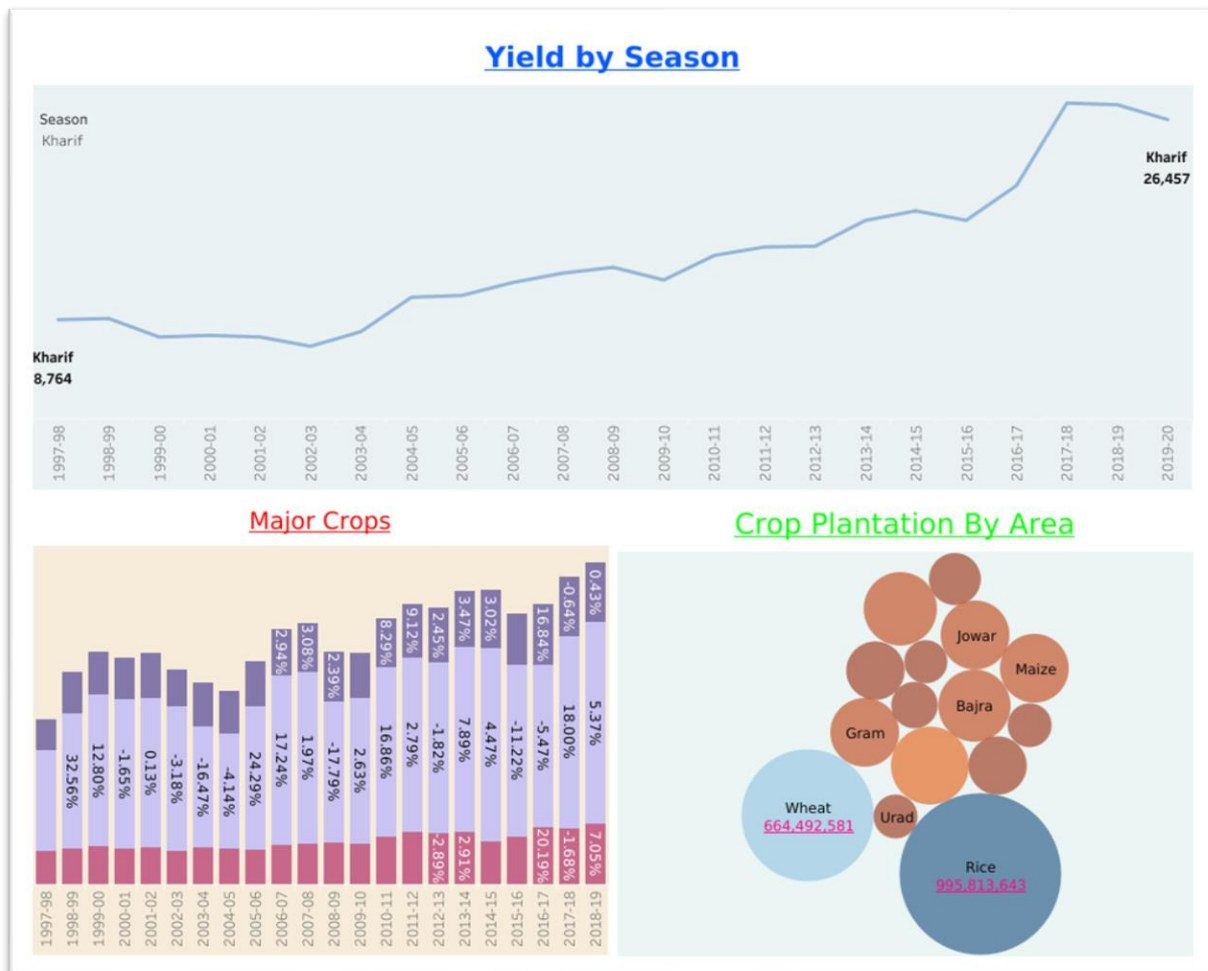
Activity 1: Dashboard I



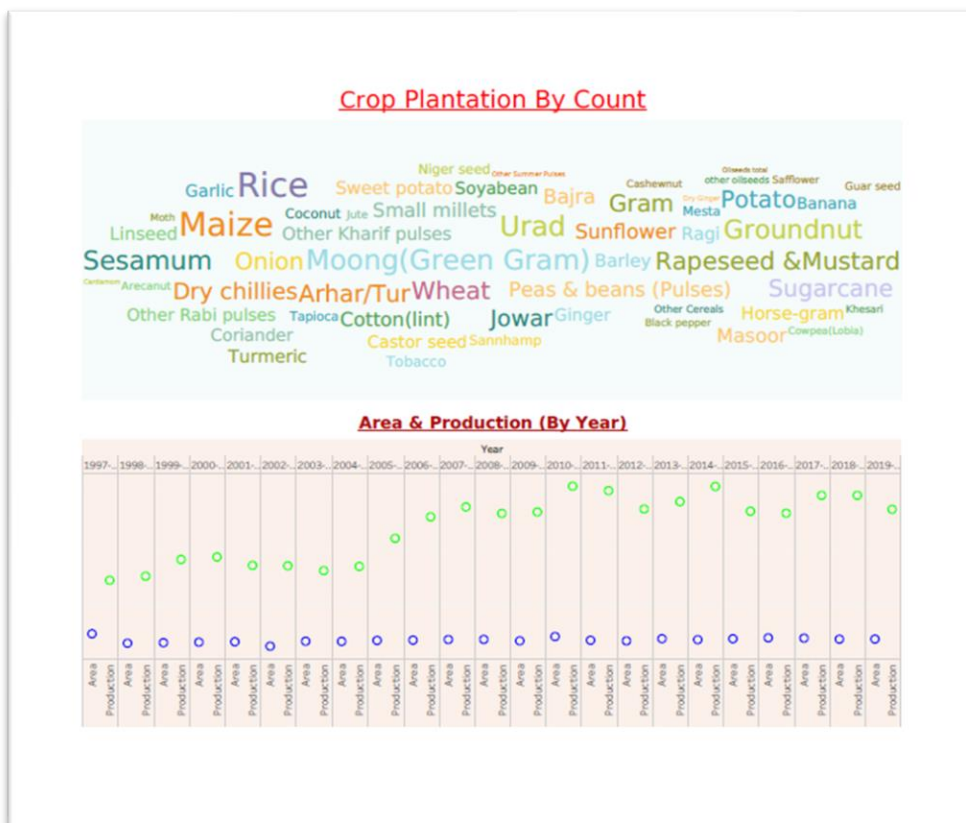
Activity 2: Dashboard II



Activity 3: Dashboard III



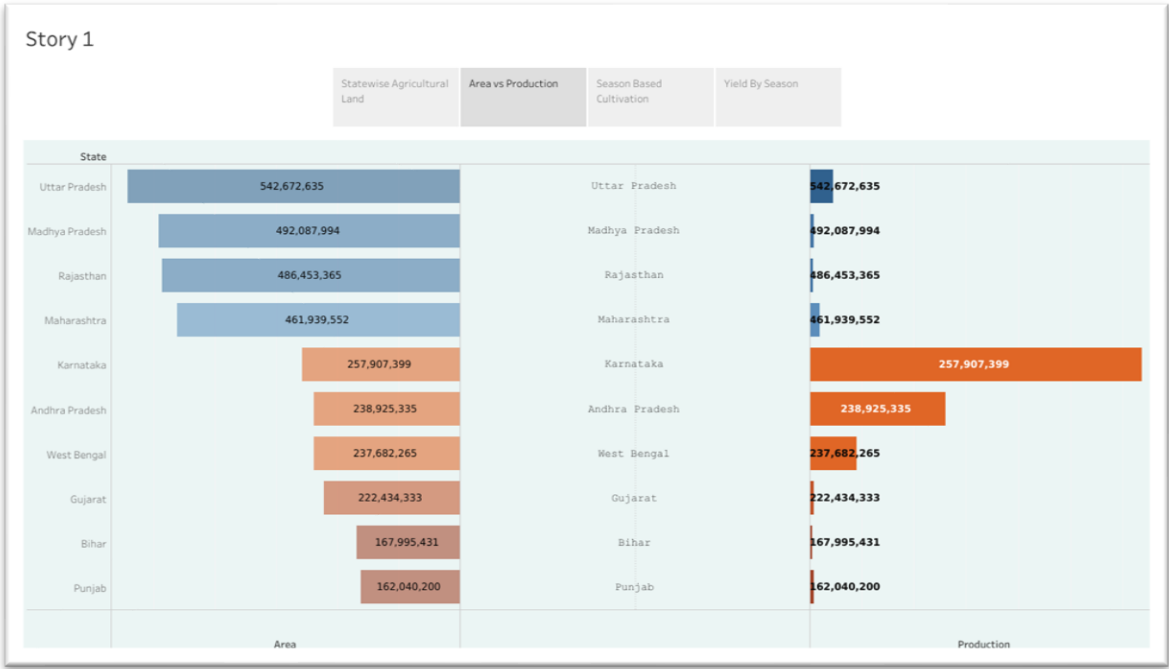
Activity 4: Dashboard IV



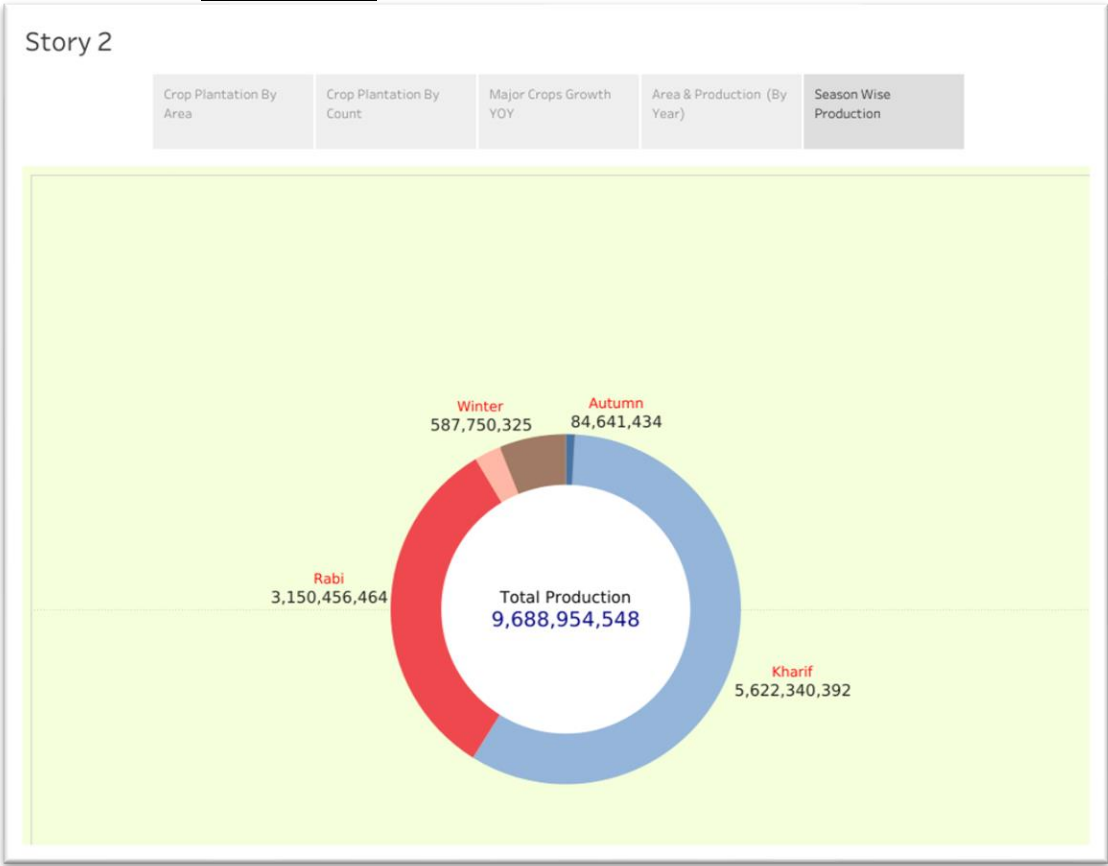
Milestone 4:

Story

Activity 1: Story I



Activity 2: Story II



Milestone 4:

Publish in Tableau Public

Activity 1:

i. Dashboard I Publishing Link:

https://public.tableau.com/views/Dashboard1_16953871124770/Dashboard1?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

ii. Dashboard II Publishing Link:

https://public.tableau.com/views/Dashboard2_16953877416950/Dashboard2?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

iii. Dashboard III Publishing Link:

https://public.tableau.com/views/Dashboard3_16953878923280/Dashboard3?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

Activity 2:

i. Story I Publishing Link:

https://public.tableau.com/views/Story1_16953883293510/Story1?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

ii. Story II Publishing Link:

https://public.tableau.com/views/Story2_16953884324840/Story2?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

Conclusion:

I have understand India is one of the top exporter of Wheat products in the world, from the above visualizations. And Agriculture is the backbone of India. India has produce so many of different food products from different States. In this project, I have understand production units in India's Agriculture. India's Agricultural production play important role in India's Economical rate.