

Project Development Phase
Model Performance Test

Date	10 November 2022
Team ID	PNT2022TMID21477
Project Name	Estimate The Crop Yield Using Data Analytics
Maximum Marks	10 Marks

Model Performance Testing:

Project team shall fill the following information in the model performance testing template.

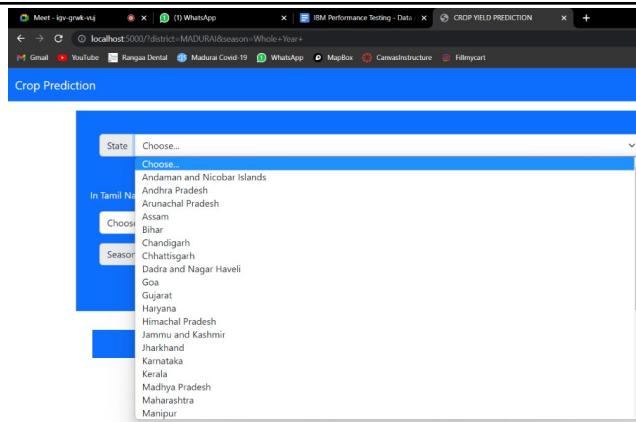
S.No.	Parameter	Screenshot / Values
1.	Dashboard design	No of Visualizations / Graphs – 13
2.	Data Responsiveness	Yes, the website is responsive completely, that is by resizing the browser window size as per the test scenario. CROP PRODUCTION DATASET The dataset contains 7 rows and 246091 record and dataset contains different state name, different district name, crop year ,crop, area, season and production
3.	Amount Data to Rendered (DB2 Metrics)	To connect IBM Db2 database cloud with cognos analytics: By using IBM Db2 to create Dashboard, Report, Story, Visualization and Exploratory data analytics(EDA)
4.	Utilization of Data Filters	Utilization of data filters - 12
5.	Effective User Story	No of Scene Added – 8 To create the Registration page of the Website To create the Login page of the Website To create the Dashboard page of the Website To work on the given dataset, Understand the Dataset Load the dataset to Cloud platform then Build the required Visualizations Using the Crop production in Indian dataset, create various graphs and charts to highlight the insights and visualizations. Build a Visualizations to showcase Average Crop Production by Seasons Showcase the Yearly usage of Area in Crop Production
6.	Descriptive Reports	No of Visualizations / Graphs – 5 Visualization1 - Average Crop Production by Seasons Visualization2 - Yearly usage of area in crop production Visualization3 - Top 10 States in Crop Yield Production by Area Visualization 4 - Crop Production by State Visualization5 - Represent the States with Seasonal Crop Production using a Text representation

The image displays three screenshots of a web-based crop prediction application, showing the user interface and its functionality.

Screenshot 1: The application interface for selecting a district. A dropdown menu titled "District" is open, showing a list of districts in Tamil Nadu. The district "MADRASI" is selected. The background features a photograph of a green field under a blue sky with clouds. The browser's address bar shows the URL `localhost:5000/?district=MADRASI&season=Whole+Year+`.

Screenshot 2: The application interface for selecting a season. A dropdown menu titled "Season" is open, showing options: Choose..., Kharif, Whole Year, Summer, Rabi, Winter, and Autumn. The "Whole Year" option is selected. The background photograph remains the same.

Screenshot 3: The final results page. The user has selected "MADRASI" from the district dropdown and "Whole Year" from the season dropdown. A large "RESULT" button is visible. Below it, three yellow boxes display the predicted crop yields: "THE MADRASI WILL PRODUCE 1758.00 TONS OF Arhar/Tur DURING Whole Year", "THE MADRASI WILL PRODUCE 100803.00 TONS OF Banana DURING Whole Year", and "THE MADRASI WILL PRODUCE 48.00 TONS OF Cashewnut DURING Whole Year". The browser's address bar shows the URL `localhost:5000/?district=MADRASI&season=Whole+Year+`. The system status bar at the bottom indicates the time as 18:11:2022 and the date as 18/11/2022.



State: Choose...

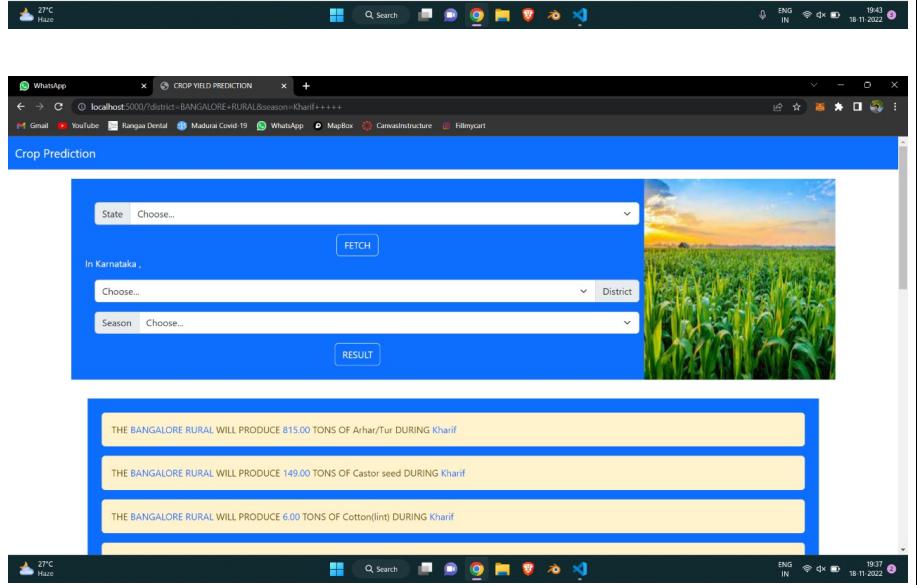
In Tamil Nadu ,

Choose...

Season: Choose...

- Andaman and Nicobar Islands
- Andhra Pradesh
- Arunachal Pradesh
- Assam
- Bihar
- Chandigarh
- Chhattisgarh
- Dadra and Nagar Haveli
- Goa
- Gujarat
- Haryana
- Himachal Pradesh
- Jammu and Kashmir
- Jharkhand
- Karnataka
- Kerala
- Madhya Pradesh
- Maharashtra
- Manipur





WhatsApp | CROP YIELD PREDICTION

localhost:5000/?district=BANGALORE+RURAL&season=Kharif++++

27°C Haze

Search

ENG IN 19:43 16/11/2022

Crop Prediction

State: Choose...

In Karnataka ,

Choose... District

Season: Choose...

RESULT

THE BANGALORE RURAL WILL PRODUCE 815.00 TONS OF Arhar/Tur DURING Kharif

THE BANGALORE RURAL WILL PRODUCE 149.00 TONS OF Castor seed DURING Kharif

THE BANGALORE RURAL WILL PRODUCE 6.00 TONS OF Cotton(lint) DURING Kharif



27°C Haze

Search

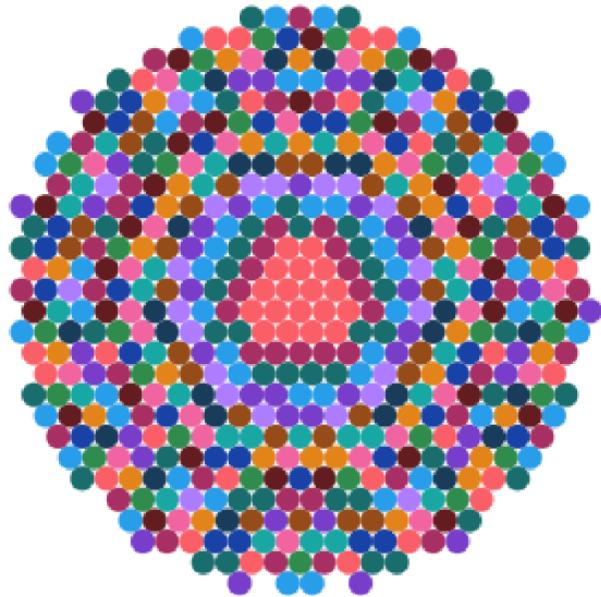
ENG IN 19:37 16/11/2022

VISUALISATIONS:

Crop_Year colored by State_Name

State_Name

Andaman and Nicobar Islands	Andhra Pradesh	Arunachal Pradesh
Assam	Bihar	Chandigarh
Chhattisgarh	Dadra and Nagar Haveli	Goa
Gujarat	Haryana	Himachal Pradesh
Jharkhand	Jammu and Kashmir	Jharkhand
Jharkhand	Karnataka	Karnataka
Jharkhand	Kerala	Kerala
Jharkhand	Lakshadweep	Lakshadweep
Jharkhand	Maharashtra	Maharashtra
Jharkhand	Madhya Pradesh	Madhya Pradesh
Jharkhand	Nagaland	Nagaland
Jharkhand	National Capital Territory of Delhi	National Capital Territory of Delhi
Jharkhand	Punjab	Punjab
Jharkhand	Rajasthan	Rajasthan
Jharkhand	Sikkim	Sikkim
Jharkhand	Telangana	Telangana
Jharkhand	Tripura	Tripura
Jharkhand	Uttarakhand	Uttarakhand
Jharkhand	Uttar Pradesh	Uttar Pradesh
Jharkhand	West Bengal	West Bengal



District_Name for State_Name and Crop_Year

District_Name	Andaman and Ni...	Andhra Pradesh	Arunachal Pradesh	Assam
1997	(no value)	13	13	
1998	(no value)	13	13	
1999	(no value)	13	13	
2000	2	13	13	
2001	2	13	13	
2002	2	13	15	
2003	2	13	15	
2004	2	13	16	
2005	2	13	16	
2006	2	13	16	

District_Name colored by Season

Season

Autumn

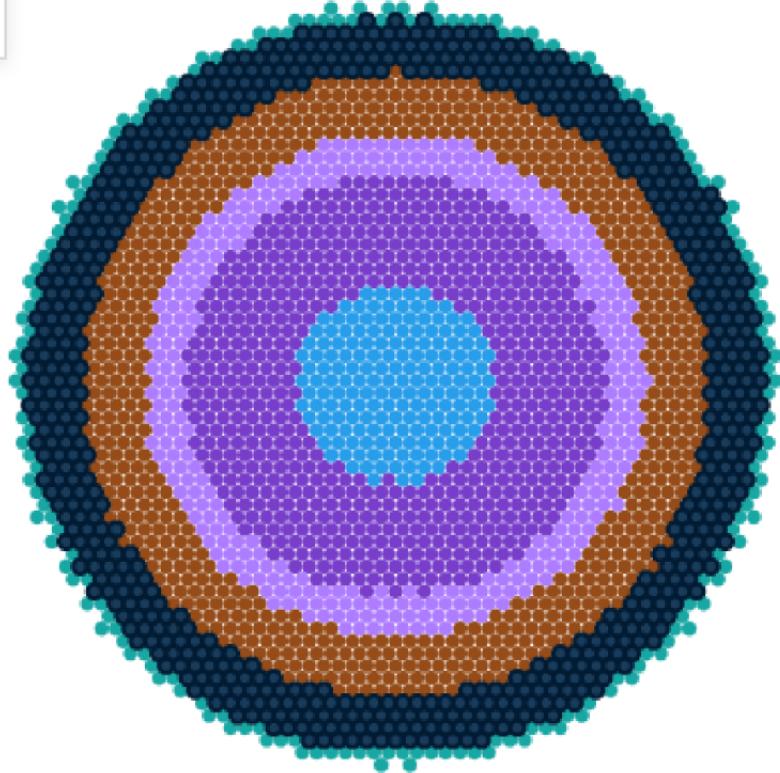
Kharif

Rabi

Summer

Whole Year

Winter



Season and Crop

Crop	Season
Apple	Whole Year
Arcanut (Processed)	Whole Year
	Kharif
Arecanut	Rabi
	Whole Year
	Autumn
	Kharif
Arhar/Tur	Rabi
	Summer
	Whole Year
	Winter

Area by Season colored by State_Name

▼ ↗ ⓘ

State_Name

West Bengal

Uttar Pradesh

Rajasthan

Punjab

Maharashtra

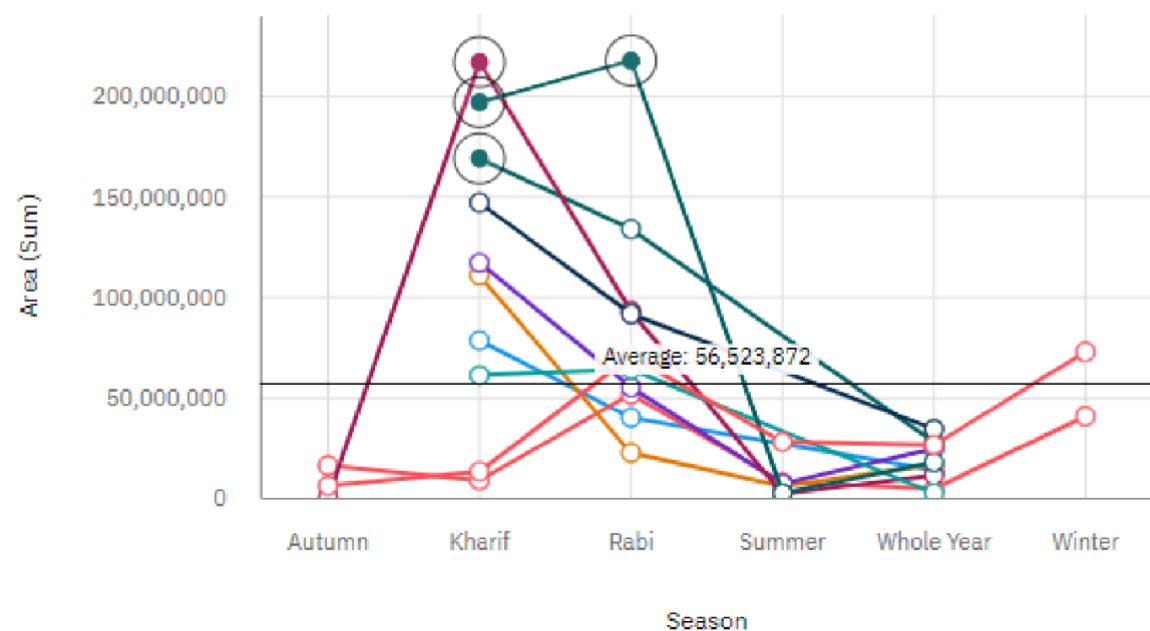
Madhya Pradesh

Karnataka

Gujarat

Bihar

Andhra Pradesh



Area and Production for State_Name regions

Area (Sum)



12,522

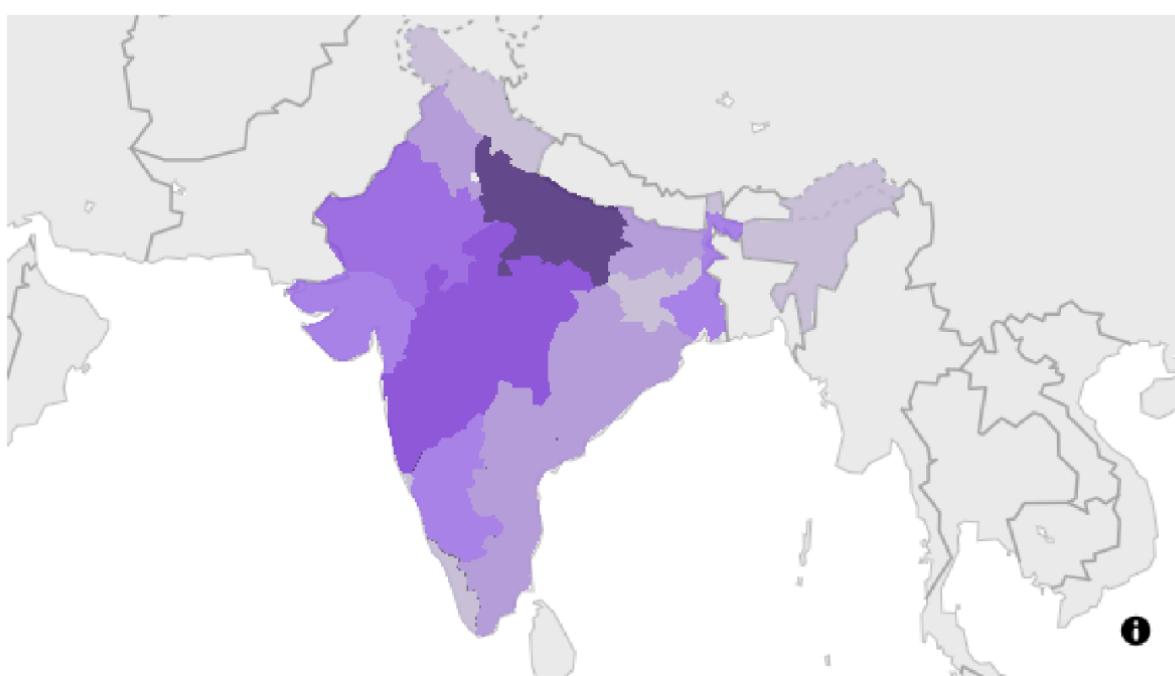
433,631,630

Production (Sum)



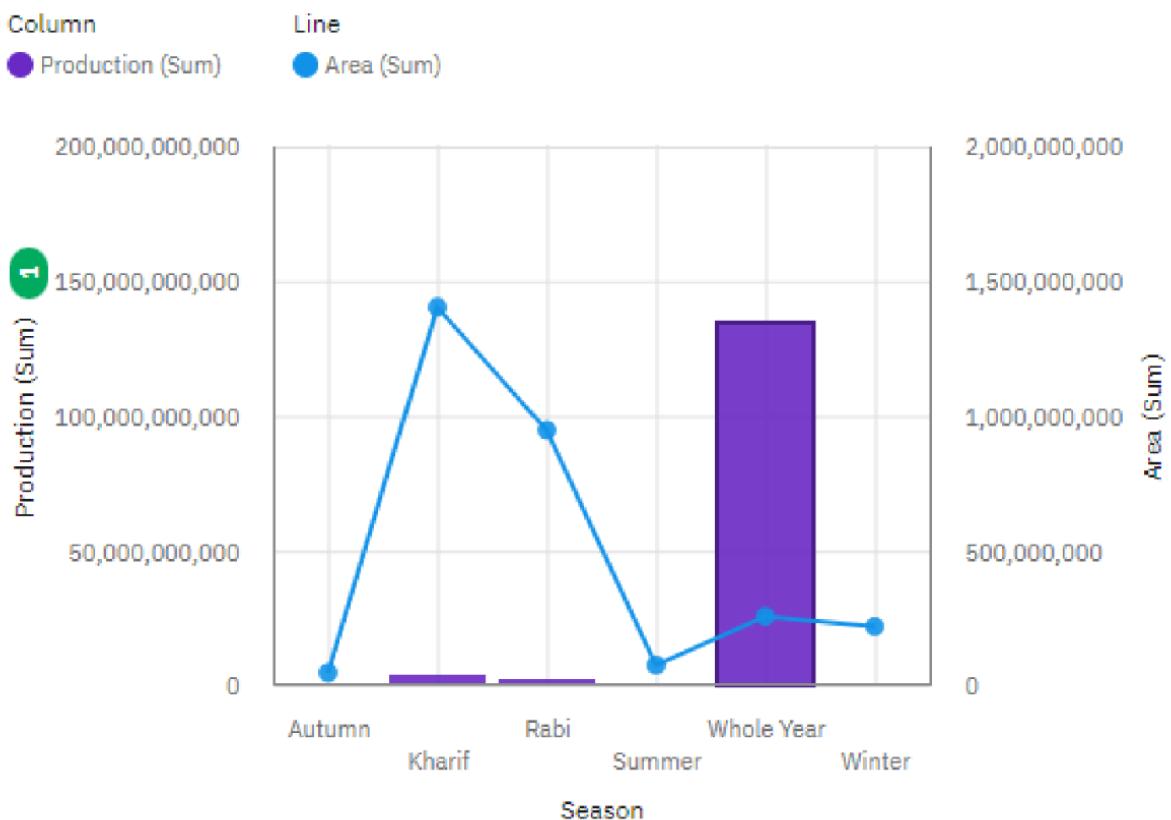
63,956.6

97,880,045,376.7



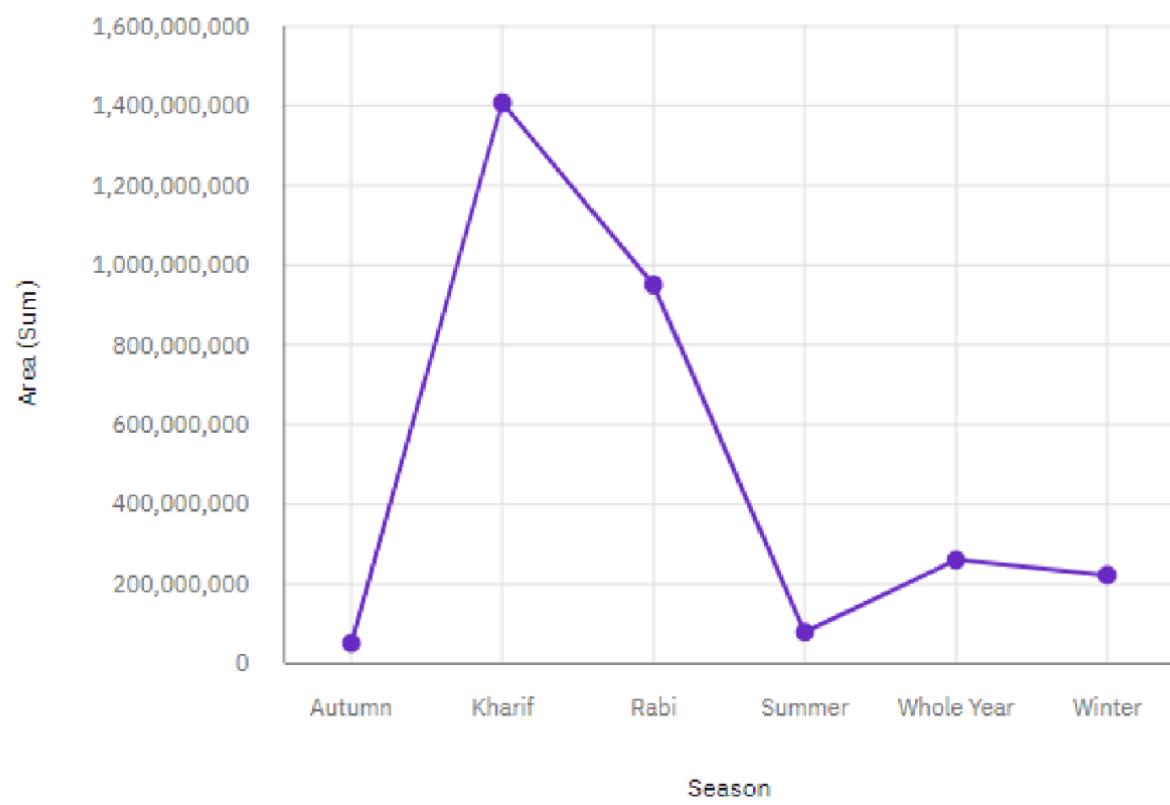
Area and Production by Season

Q



Area by season

Legend



Production for State_Name regions 1

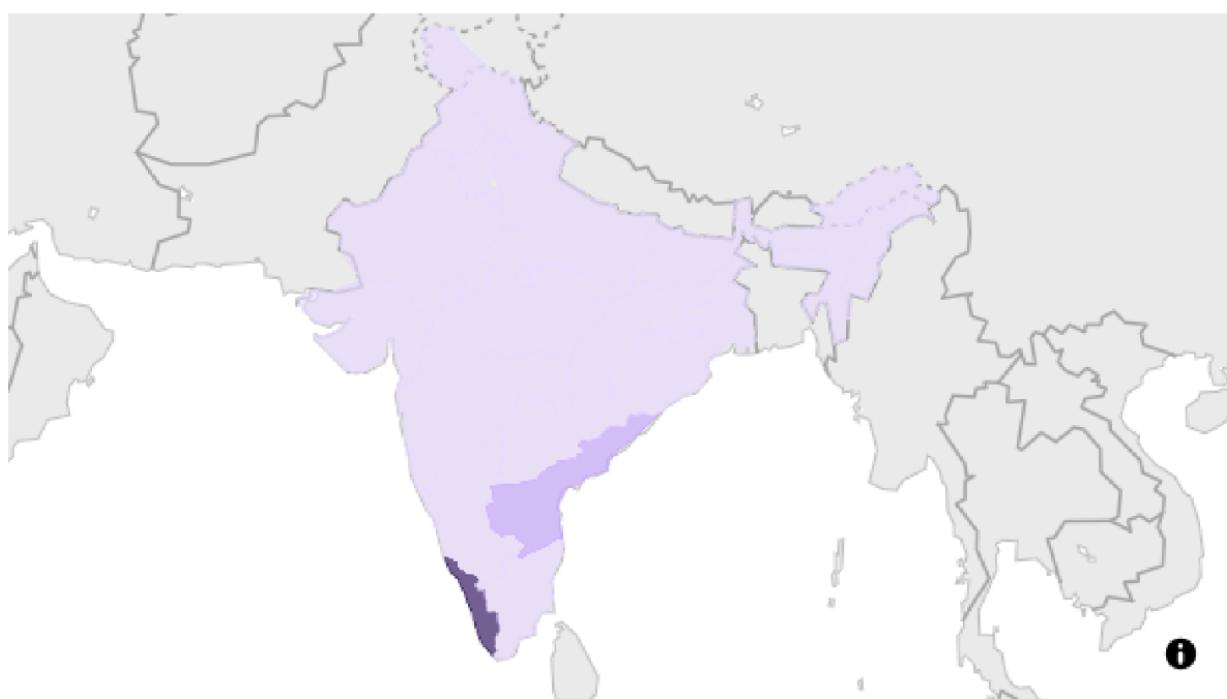


Production (Sum)



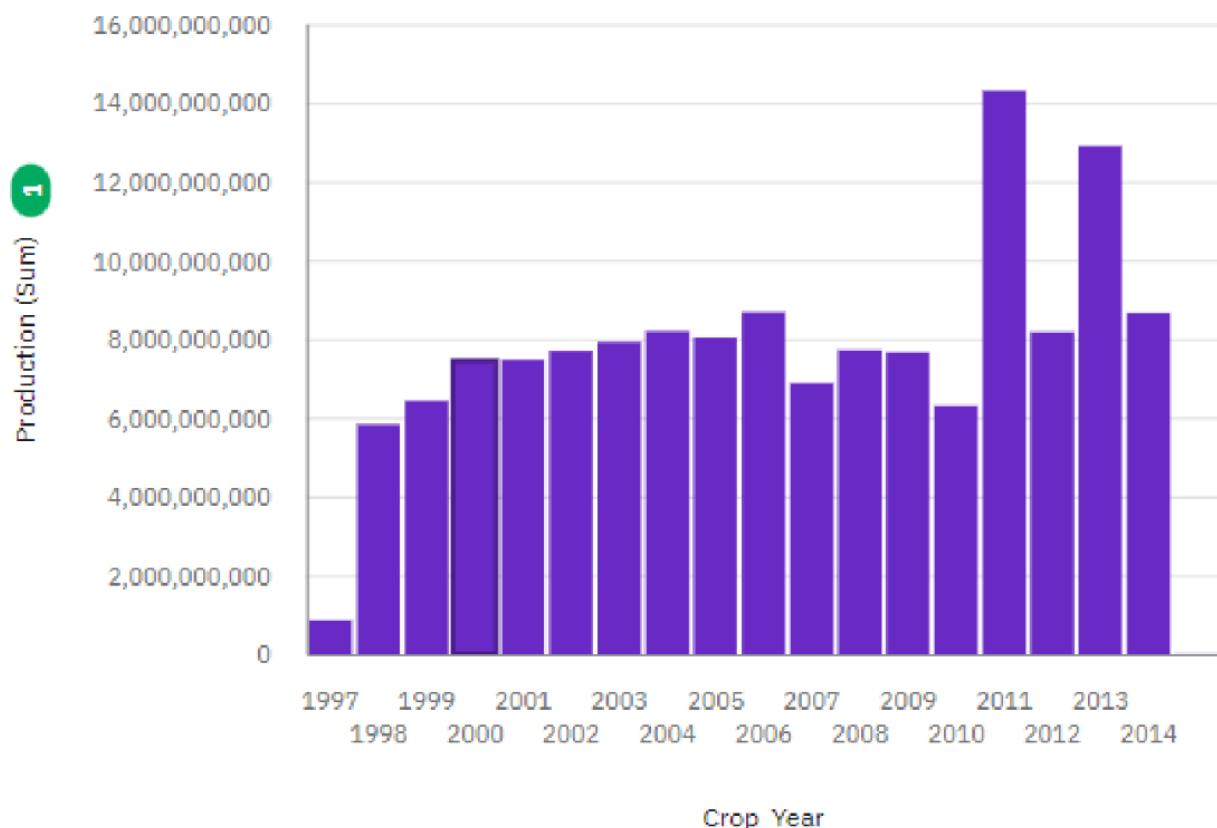
63,956.5

97,880,045,376.7



Production by Crop_Year

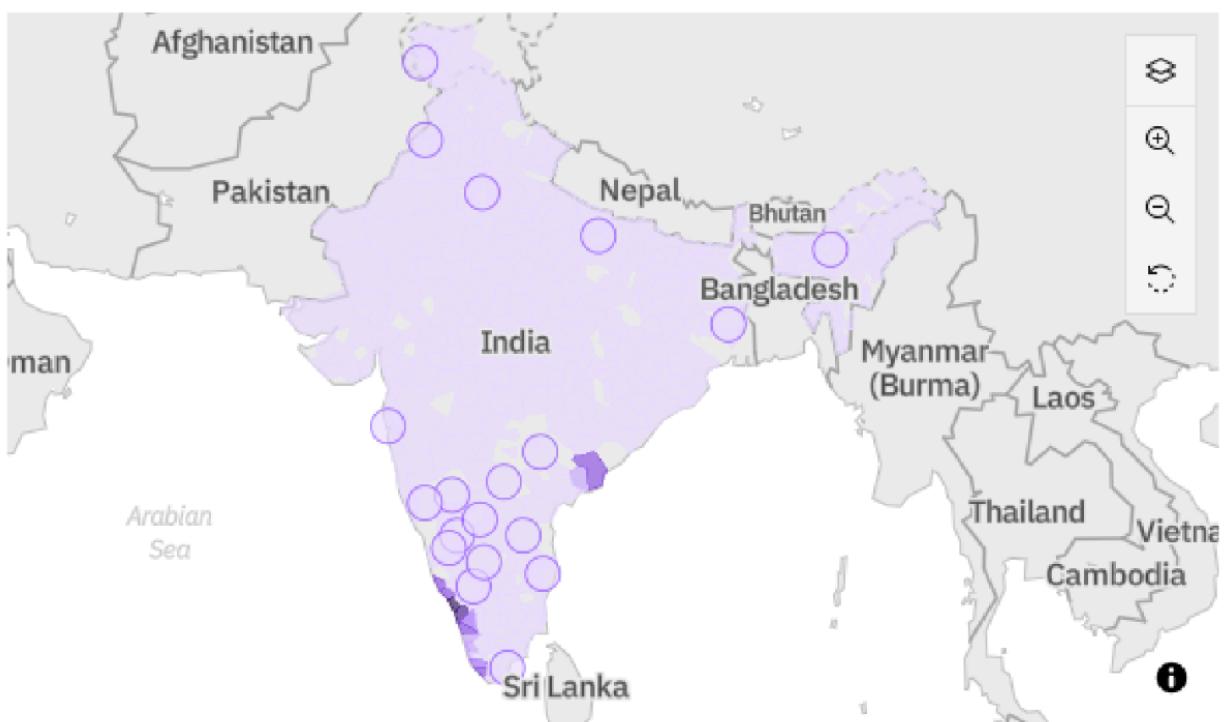
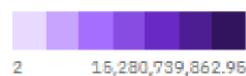
Line Q



Production for District_Name regions



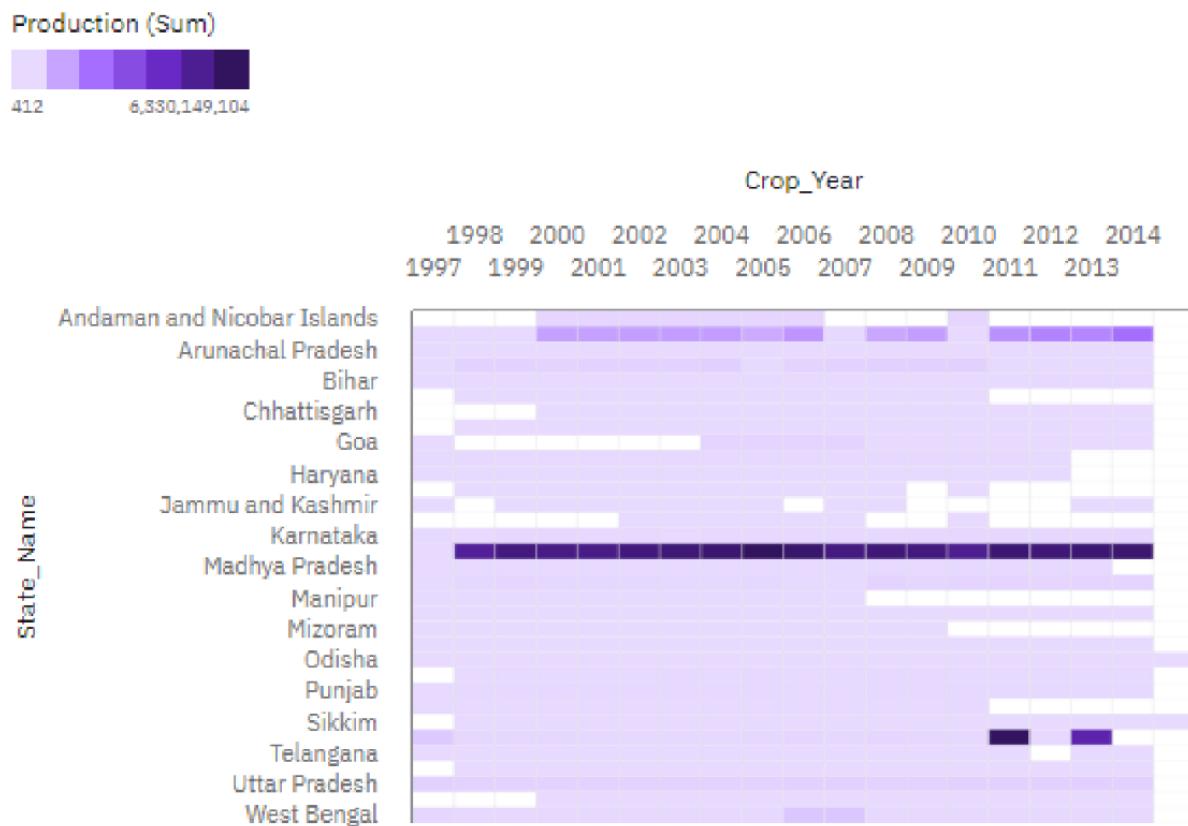
Production (Sum)



Production by State_Name and Crop_Year

1

1



Production by District_Name, Crop_Year and Area 1



Area (Sum)



Production (Sum)

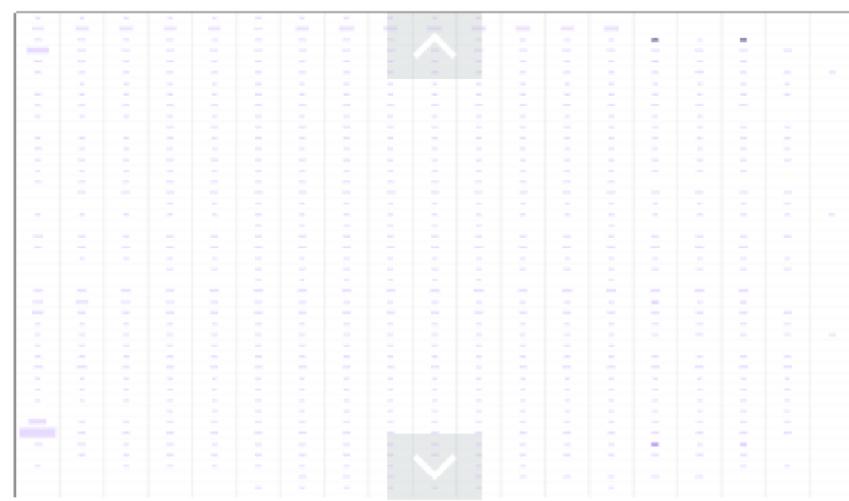


Crop_Year

1998	2000	2002	2004	2006	2008	2010	2012	2014
1997	1999	2001	2003	2005	2007	2009	2011	2013

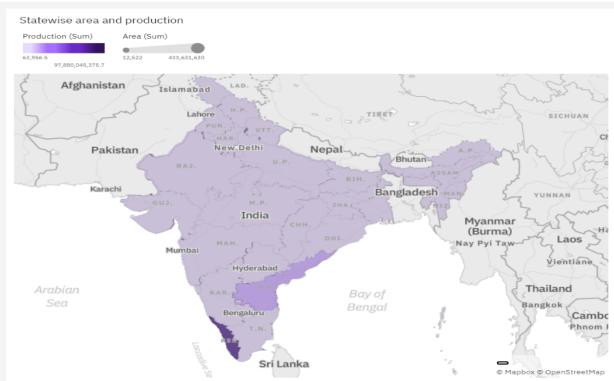
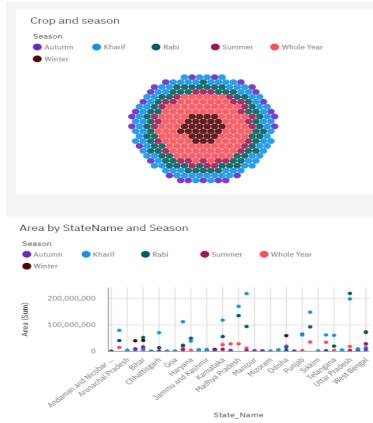
District_Name

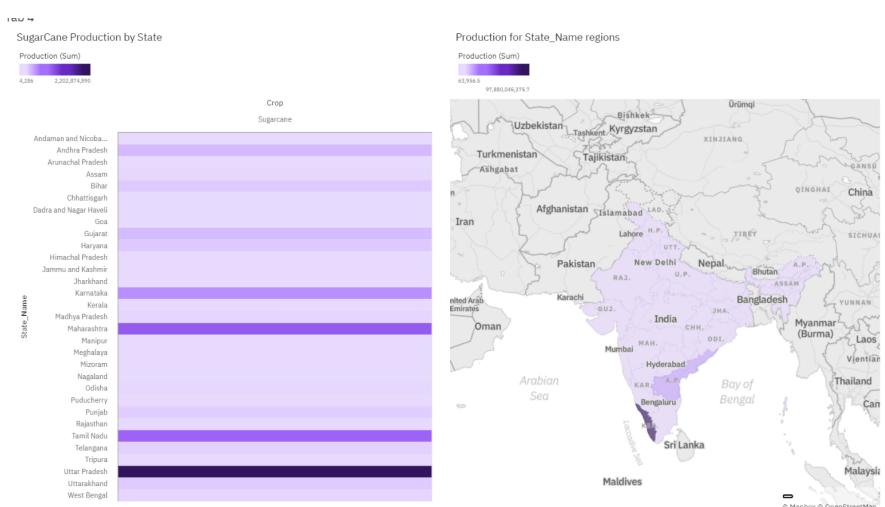
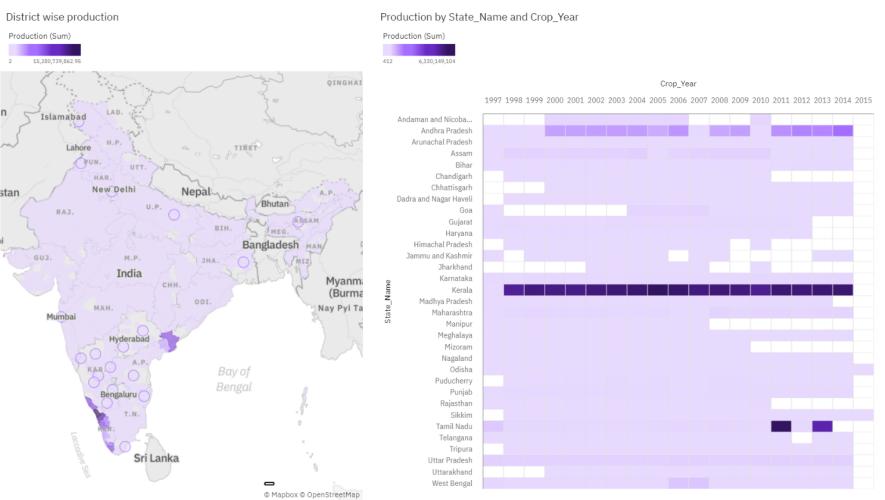
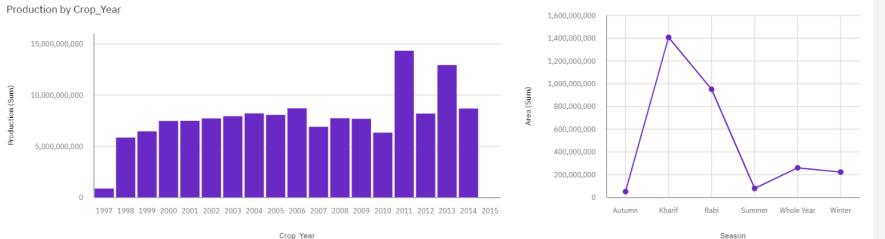
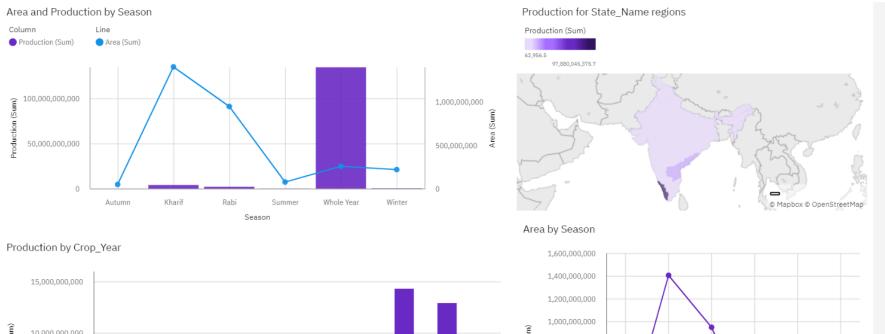
CHURACHANDPUR
CUDDALORE
DAMOH
DARJEELING
DAVANGERE
DEORIA
DHANBAD
DHEMAMI
DHULE
DIMAPUR
DINDORI

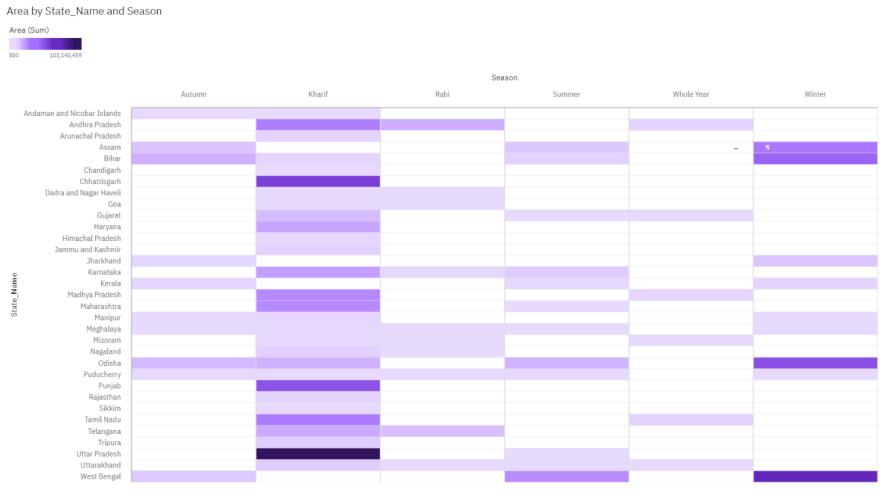


DASHBOARD:

Tab 1







STATES WITH CROP PRODUCTION ALONG WITH THE SEASON:

IBM Cognos Analytics with Watson

Selected sources: / crop_production.csv

Search: Crop

State_Name and Crop

Crop: Blackgram

State_Name: Assam, Bihar, Kerala, Nagaland

With Years Usage Of Area And Production

Top 10 States With Most Area

Blackgram

Search: Crop

Blackgram

Clear all Invert

Cancel Done

State With Crop Production

State: Assam, Bihar, Kerala, Nagaland

Season and Crop

Crop: Blackgram

Season: Kharif, Rabi, Whole Year

Top 10 States With Most Area

State With Crop Production

State: Assam, Bihar, Kerala, Nagaland