

## Project Development Phase

### SPRINT-4

Date	17 November 2022
Team ID	PNT2022TMID42593
Project Name	Estimate the crop yield using data analytics.

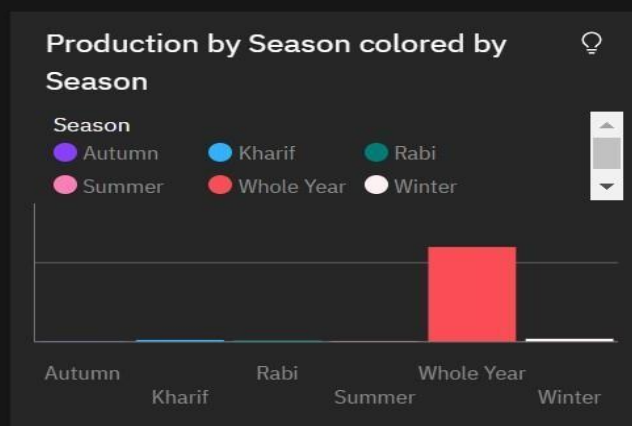
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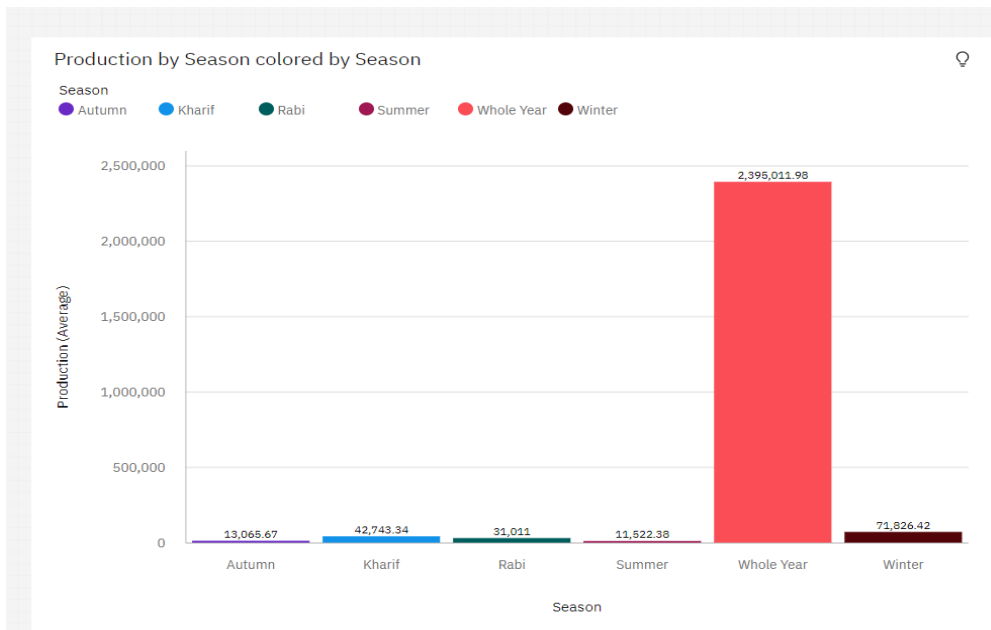
[https://us1.ca.analytics.ibm.com/bi/?perspective=story&pathRef=.my\\_folders%2Fdb2%2Bstory%2Bon%2Bcrop%2Bproduction&action=view&sceneId=model0000018452cdd762\\_00000000&sceneTime=700](https://us1.ca.analytics.ibm.com/bi/?perspective=story&pathRef=.my_folders%2Fdb2%2Bstory%2Bon%2Bcrop%2Bproduction&action=view&sceneId=model0000018452cdd762_00000000&sceneTime=700)

ESTIMATE THE CROP YIELD USING DATA ANALYTICS

## Seasons with Average Production

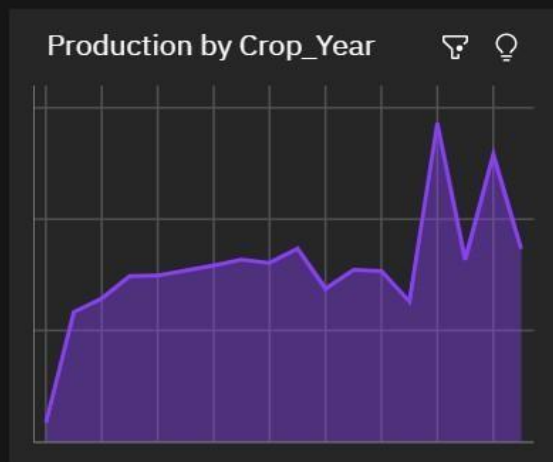
- The production levels during the **Winter** is the highest being **71,826.42 tonnes per hectare**
- It is the least during the **Summer** which is only **11,522.38 tonnes per hectare**
- Overall, throughout the year a good production level of above **2 million** is observed

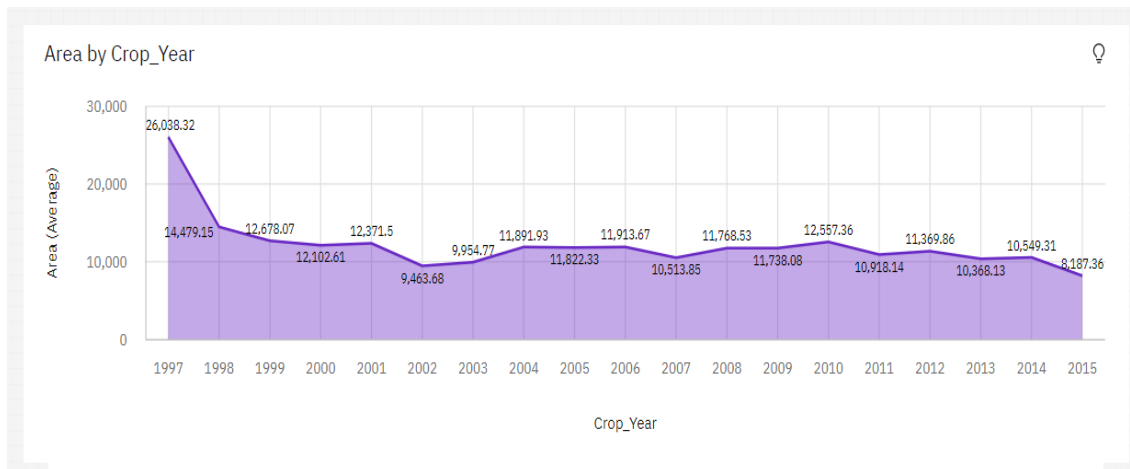




# Production by Crop\_Year

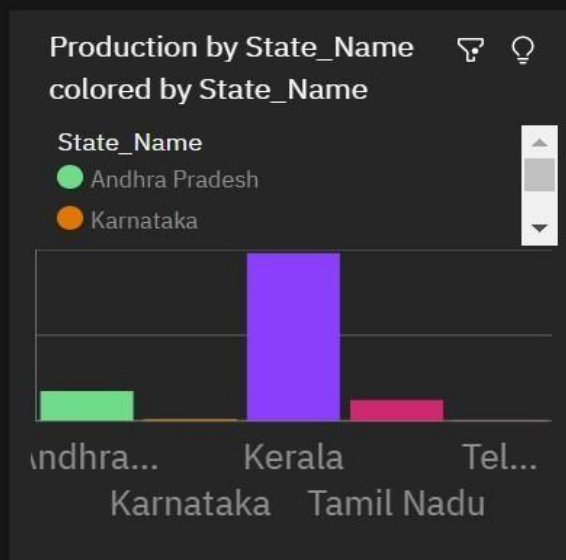
- In **1997**, the production was very less having a value of only around **800 million tonnes per hectare**
- From **1998 to 2010**, there is a stable average production level of **6 to 7 billion tonnes per hectare**
- During the years **2011 and 2013**, there has been a considerable spike in the production of **14**



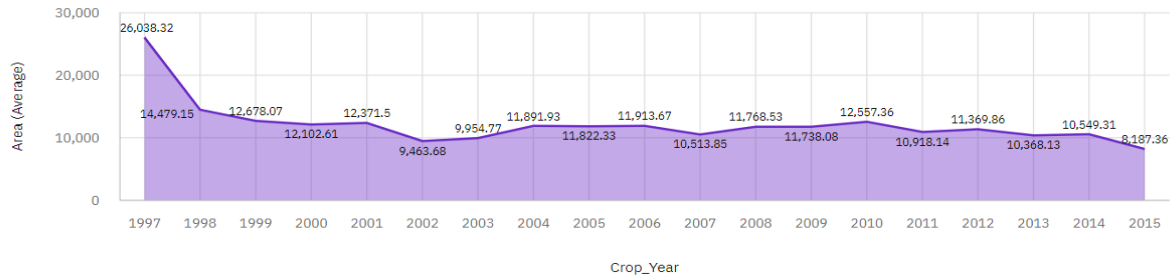


# Southern Zone Production

- In the south, Kerala has the highest production level of over **97 billion tonnes/hectare**
- Telangana and Karnataka show the **lowest production levels.**



Area by Crop\_Year



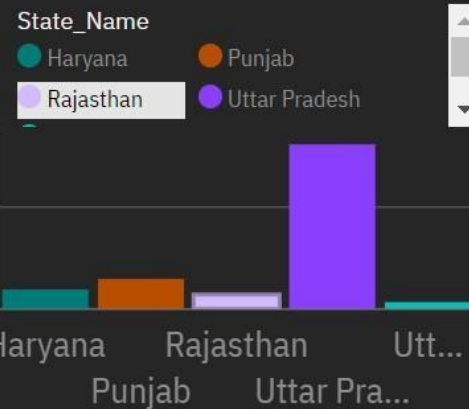
Production by Crop\_Year

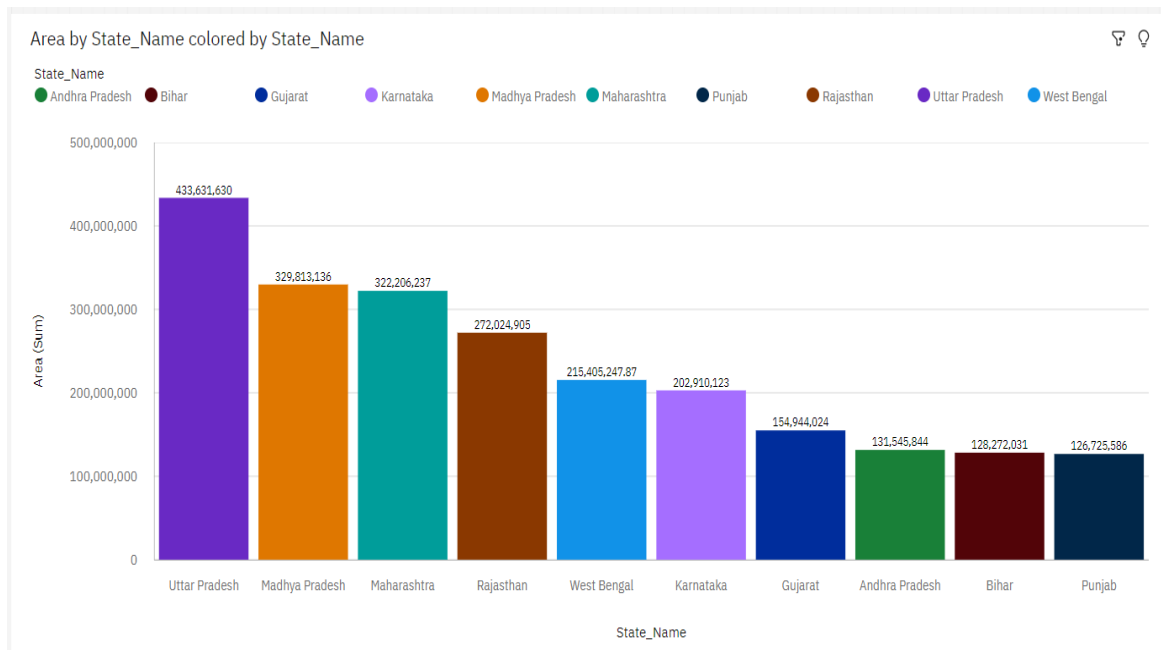


# Northern zone Production

- This shows the crop production in the North
- **Uttar Pradesh** shows the maximum production level of over 3 billion tonnes/hectare
- **Uttarakhand**, however has the least which is only around 132 million tonnes/hectare

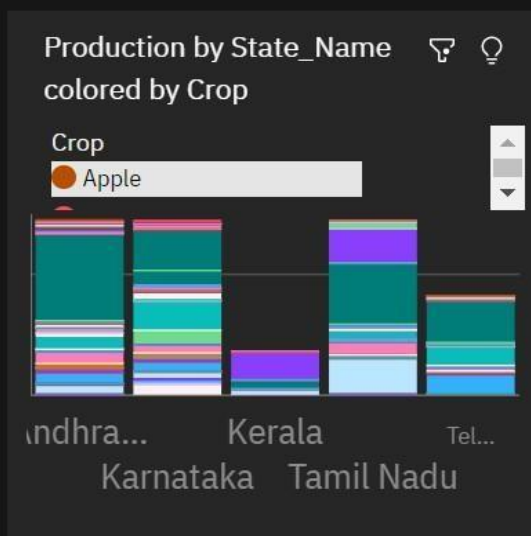
Production by State\_Name colored by State\_Name

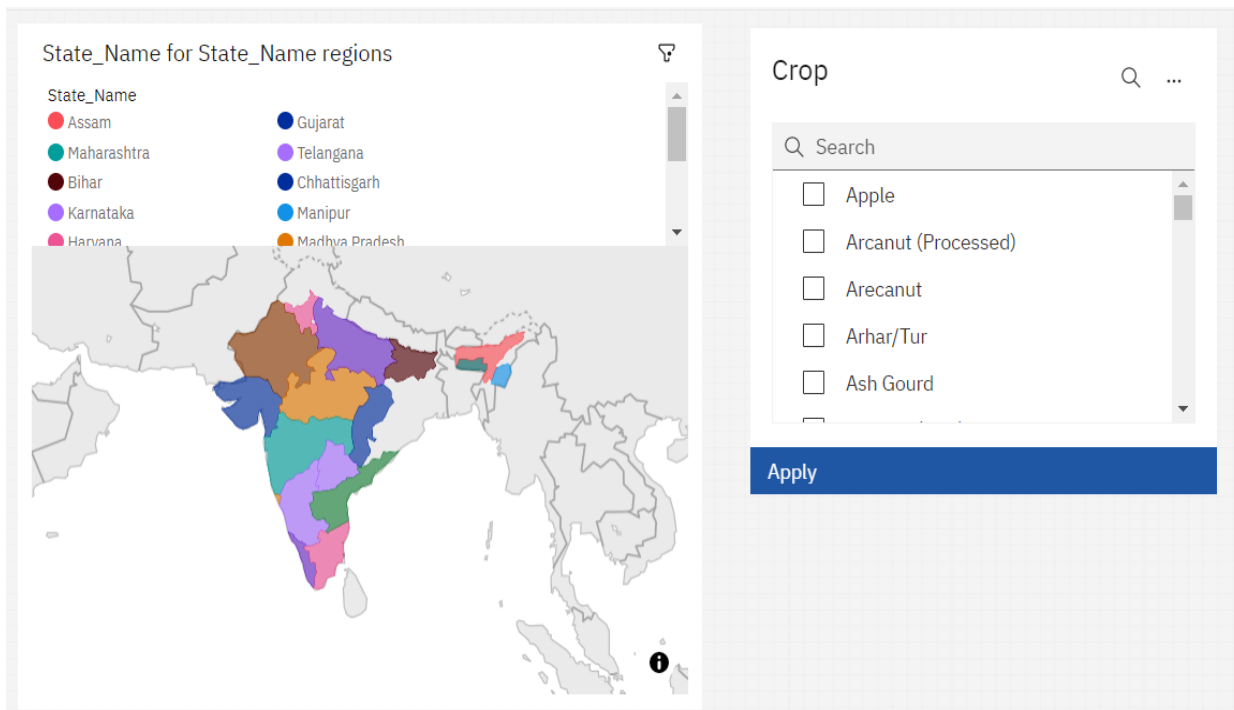




## Production of each crop in the Southern Zone

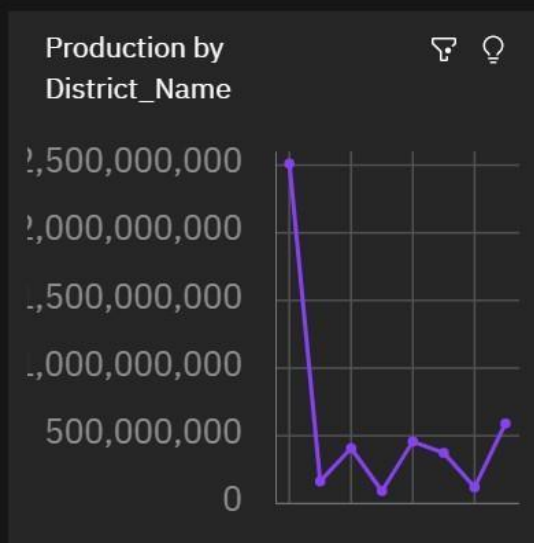
- This shows how much of different types of crops grow in the South
- **Rice** is the most common crop in the Southern Region
- Various other crops such as jackfruit, banana, etc. are





## Production in each Tamil Nadu Districts

- This chart talks about Production in various districts of Tamil Nadu alone.
- Coimbatore** has the maximum production level of over **2 billion tonnes/hectare**
- The rest of the districts are more or less stable in terms of production, **Kanchipuram** having the least



Crop	State_Name
Apple	Tamil Nadu
Arcanut (Processed)	Karnataka
Arecanut	Andaman and Nicobar Islands
	Andhra Pradesh
	Assam
	Goa
	Karnataka
	Kerala
	Meghalaya
	Puducherry
	Tamil Nadu
	West Bengal
	Andaman and Nicobar Islands
	Andhra Pradesh
	Assam

Search
<input type="checkbox"/> Apple
<input type="checkbox"/> Arcanut (Processed)
<input type="checkbox"/> Arecanut
<input type="checkbox"/> Arhar/Tur
<input type="checkbox"/> Ash Gourd
Apply

Crop	Season
Arhar/Tur	Kharif
Bajra	Kharif
Banana	Whole Year
Barley	Rabi
Castor seed	Kharif

# Production vs Crop

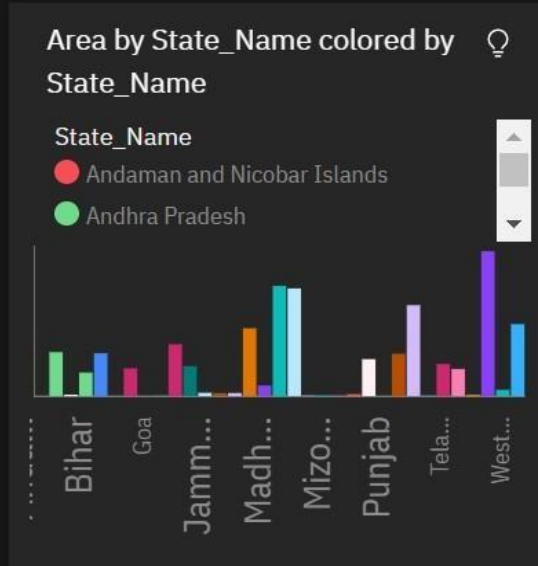
- Here we see the production of different crops across India
- **Groundnut** is grown the most having a production level of over **111 million tonnes/hectare**
- **Ginger** on the other hand , has only about **821,000 tonnes/hectare**





# Area vs State

- This shows us the crop area covered by various states
- **Uttar Pradesh** stand first with a crop area of **433 million sq. hectare**
- Few other States that hold large areas include **Madhya Pradesh, Maharashtra and Rajasthan**



# Area and Production in certain Districts

- This graph is about the crop production and area covered by various districts of India.
- Here, **Anantapur** in Andhra Pradesh holds the largest crop area of **18 million hectares** and produces **81 million tonnes/hectare** of crop
- **Deoghar** in **Jharkhand**, has covers the least area (**360,000 hectares**) and production (**480,00 tonnes/hectare**)

