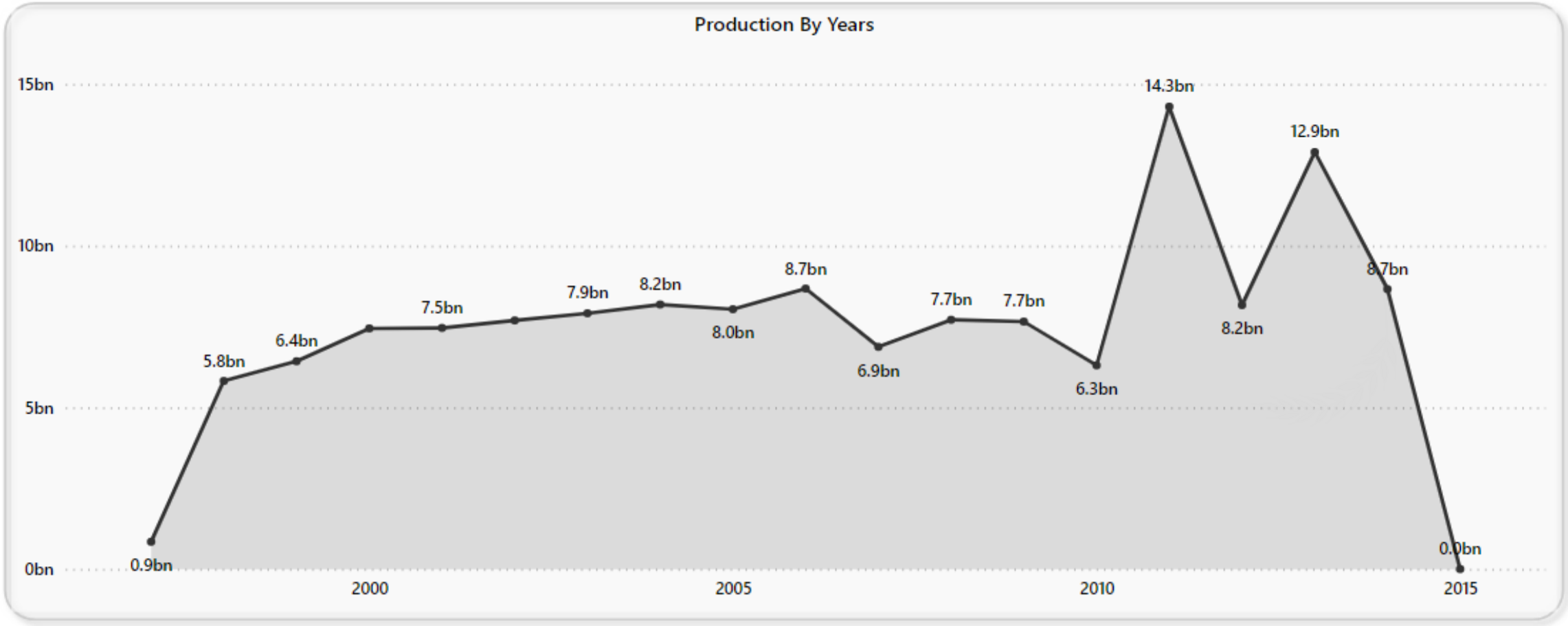
Crop Production Analysis in India

Problem Statement

As a vital part of the overall supply chain, the Agriculture business domain is expected to evolve highly in the upcoming years via the developments, which are taking place on the side of the Future Internet. This paper presents a novel Business-to-Business collaboration platform from the agri-food sector perspective, which aims to effectively and flexibly facilitate the collaboration of numerous stakeholders belonging to associated business domains. This dataset provides a huge amount of information on crop production in India over several years. Based on the Information the ultimate goal would be to predict crop production and find important insights highlighting key indicators and metrics that influence crop production.

Production by Years

1995: Production was **850 million** units.
2011: Production increased to **14.3 billion** units, representing a **1,582% increase** from **1995**.
2014: Production decreased to **8.66 billion** units, reflecting a **39.44% decrease** from **2011**.



Key Metrics

141bn+

Total Production

The overall quantity of harvested crops over a specific period includes grains, vegetables, fruits, and other plant-based products.

2.90bn+

Total Area

Total area for agriculture, residential, commercial, and industrial activities, including farming, urban development, infrastructure, and natural reserves.

100+

Crop Types

This includes grains (e.g., rice, barley), fruits (e.g., bananas, coconuts), vegetables (e.g., tomatoes, potatoes), and others (e.g., sugarcane, cotton, and bajra).

42

Average Production/Unit Area

The overall yield of crops is the amount harvested per unit of land area, typically measured in weight per hectare or acre. This metric reflects agricultural productivity and farming practices.

6

Seasons

A diverse range of agricultural products is cultivated across distinct growing seasons, including crops that grow year-round.eg Autumn, Summer, Kharif, Rabi, Winter, and crops that grow the whole year

Production by State

Kerala:

- Total Production: **97.88 billion**
- **Highest** producer of crops

Andhra Pradesh:

- Total Production: **17.32 billion**
- **Second highest** producer of crops.

Tamil Nadu:

- Total Production: **12 billion**
- **Third highest** producer of crops

Production by District

Kozhikode:

- Total Production: **15.28 billion**
- **Highest** producer of crops

Malappuram:

- Total Production: **14.52 billion**
- **Second highest** producer of crops

Thiruvananthapuram:

- Total Production: **10 billion**
- **Third highest** producer of crops

Production by Season

Whole Year:

- Total Production: **134.42 billion**
- **Highest** production throughout the year **Mostly Coconut**

Kharif Season:

- Total Production: **4 billion**
- **Second-highest** production

Rabi Season:

- Total Production: **2 billion**
- **Third-highest** production

Production by Seasons

Autumn Season:

- Total Production: 64 million
- Highest Producer: Rice (51 million)
- Second Highest: Maize (8 million)
- Third Highest: Paddy (2 million)

Kharif Season:

- Total Production: 4 billion
- Highest Producer: Sugarcane (1.77 billion)
- Second Highest: Rice (1 billion)
- Third Highest: Cotton (281 million)

Rabi Season:

- Total Production: 2 billion
- Highest Producer: Wheat (1.32 billion)
- Second Highest: Potato (200 million)
- Third Highest: Gram (95 million)

Whole Year:

- Total Production: 134 billion
- Highest Producer: Coconut (129 billion)
- Second Highest: Sugarcane (3.75 billion)
- Third Highest: Potato (200 million)

Home

Map

Crop Production Analysis

Year: All

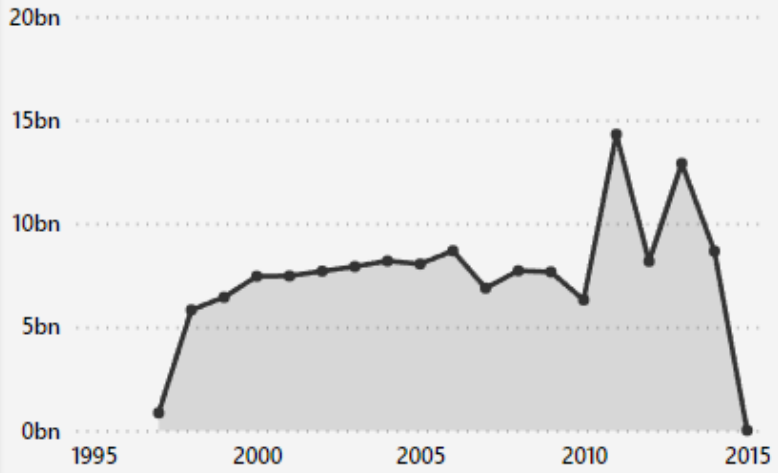
Crop: All

Season: All

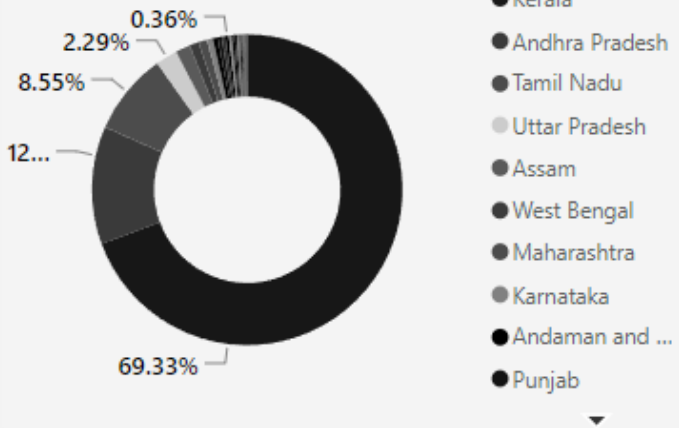
District: All

State: All

Production By Years



Production by State



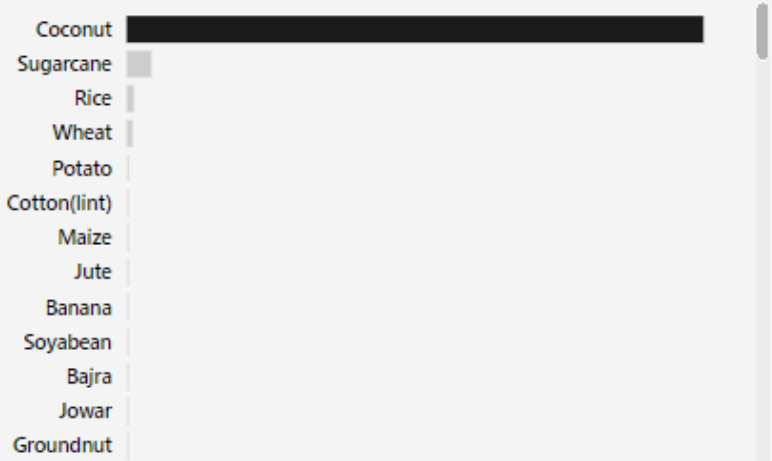
141.18bn
Total Production

2.95bn
Total Area

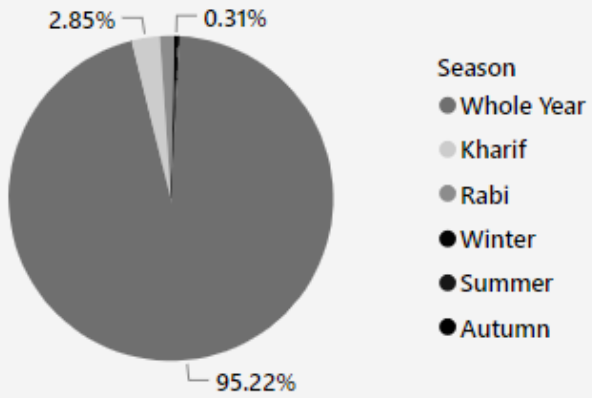
105
Total Crop Type

42
Avg Production/UnitArea

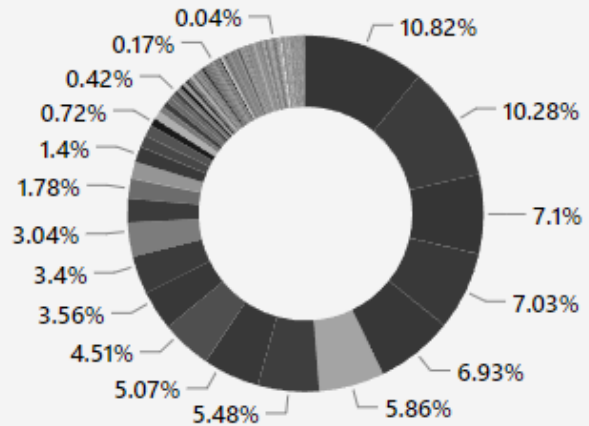
Production by Crop



Production by Seasons



Production by District



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Map

Crop Production Analysis

Year: All

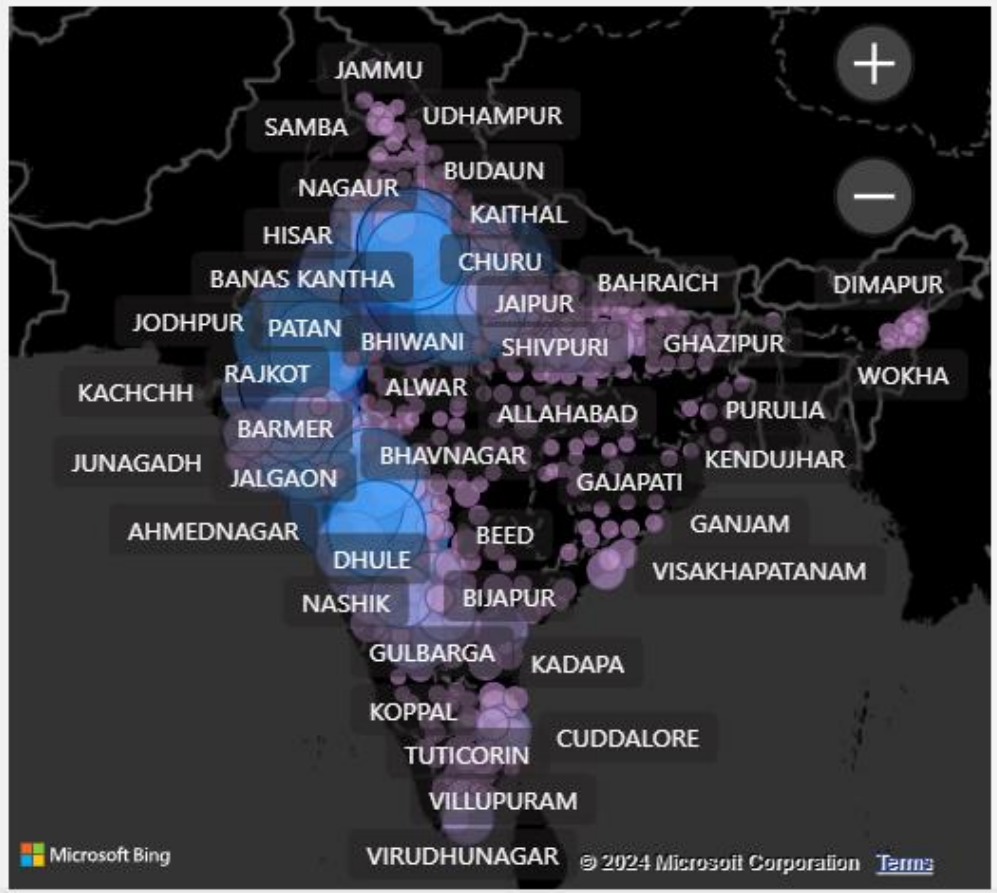
Crop: All

Season: All

District: All

State: All

Bajra



Pro

20bn
15bn
10bn
5bn
0bn
1995
2000

e_Name
erala
ndhra Pradesh
mil Nadu
ttar Pradesh
ssam
est Bengal
aharashtra
arnataka
ndaman and ...
unjab

141.18bn
Total Production

2.95bn
Total Area

105
Total Crop Type

42
Avg Production/UnitArea

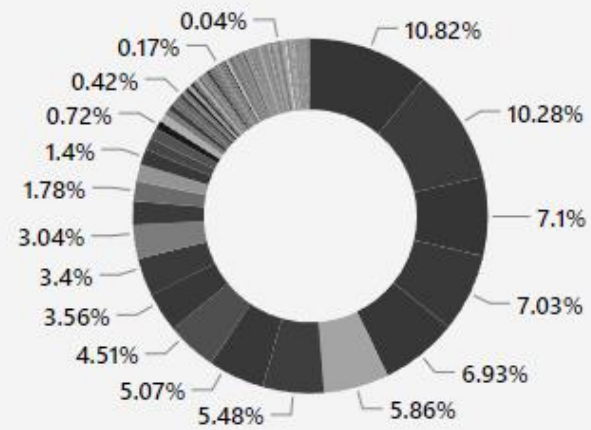
Coconut
Sugarcane
Rice
Wheat
Potato
Cotton(lint)
Maize
Jute
Banana
Soyabean
Bajra
Jowar
Groundnut

asons

Season
- Whole Year
- Kharif
- Rabi
- Winter
- Summer
- Autumn

93.22%

Production by District



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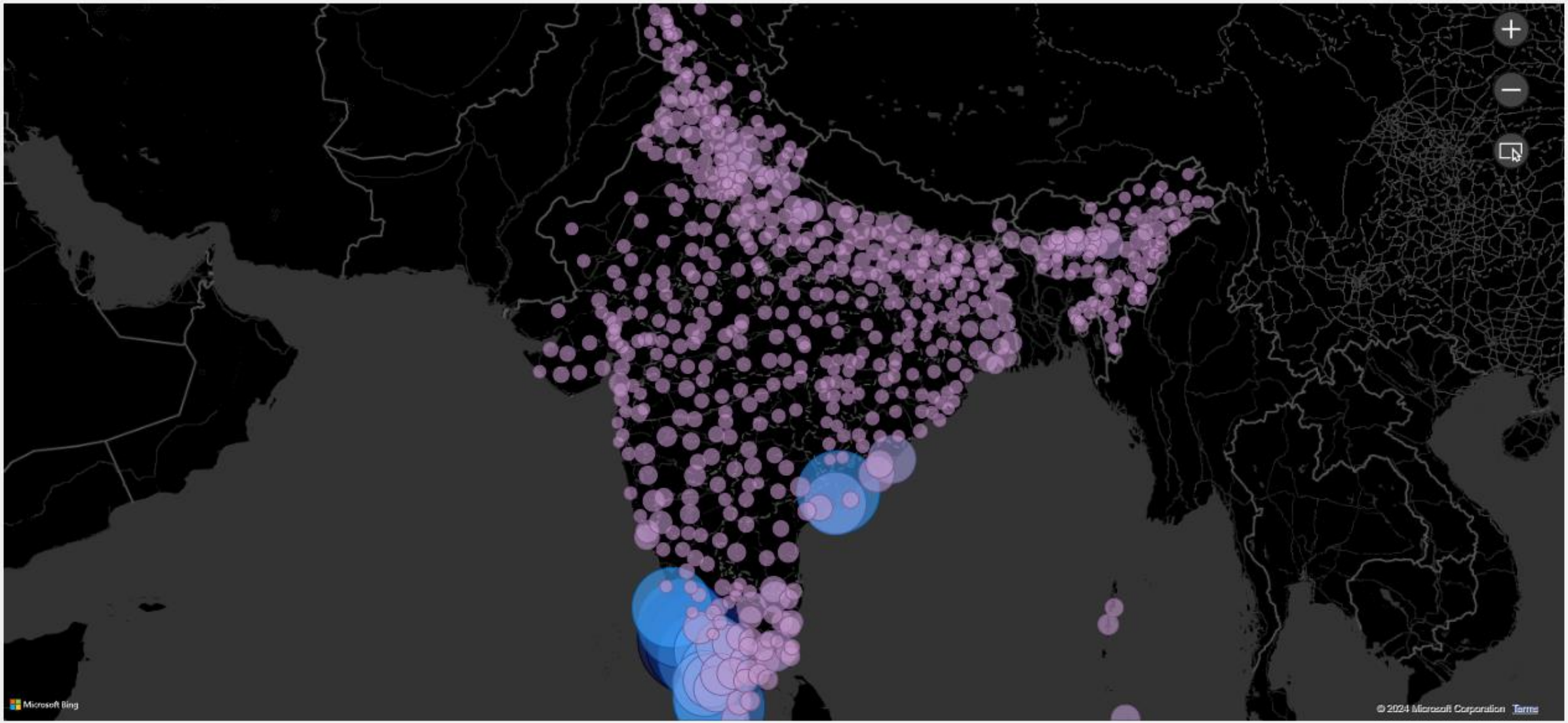
Map

Crop Production Analysis

Year	Crop	Season	District	State
All	All	All	All	All



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Map

Crop Production Analysis

Year: All

Crop: All

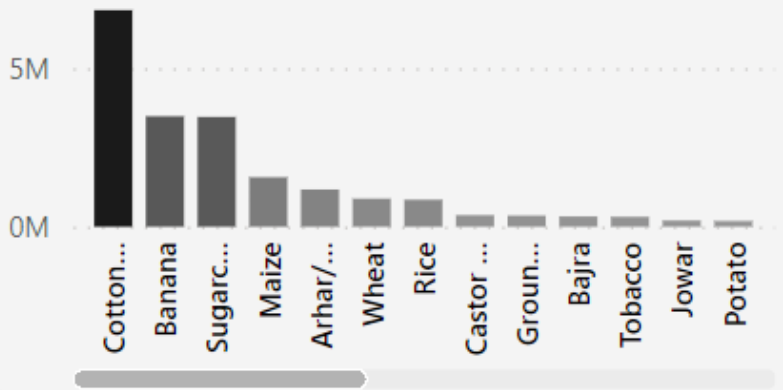
Season: All

District: All

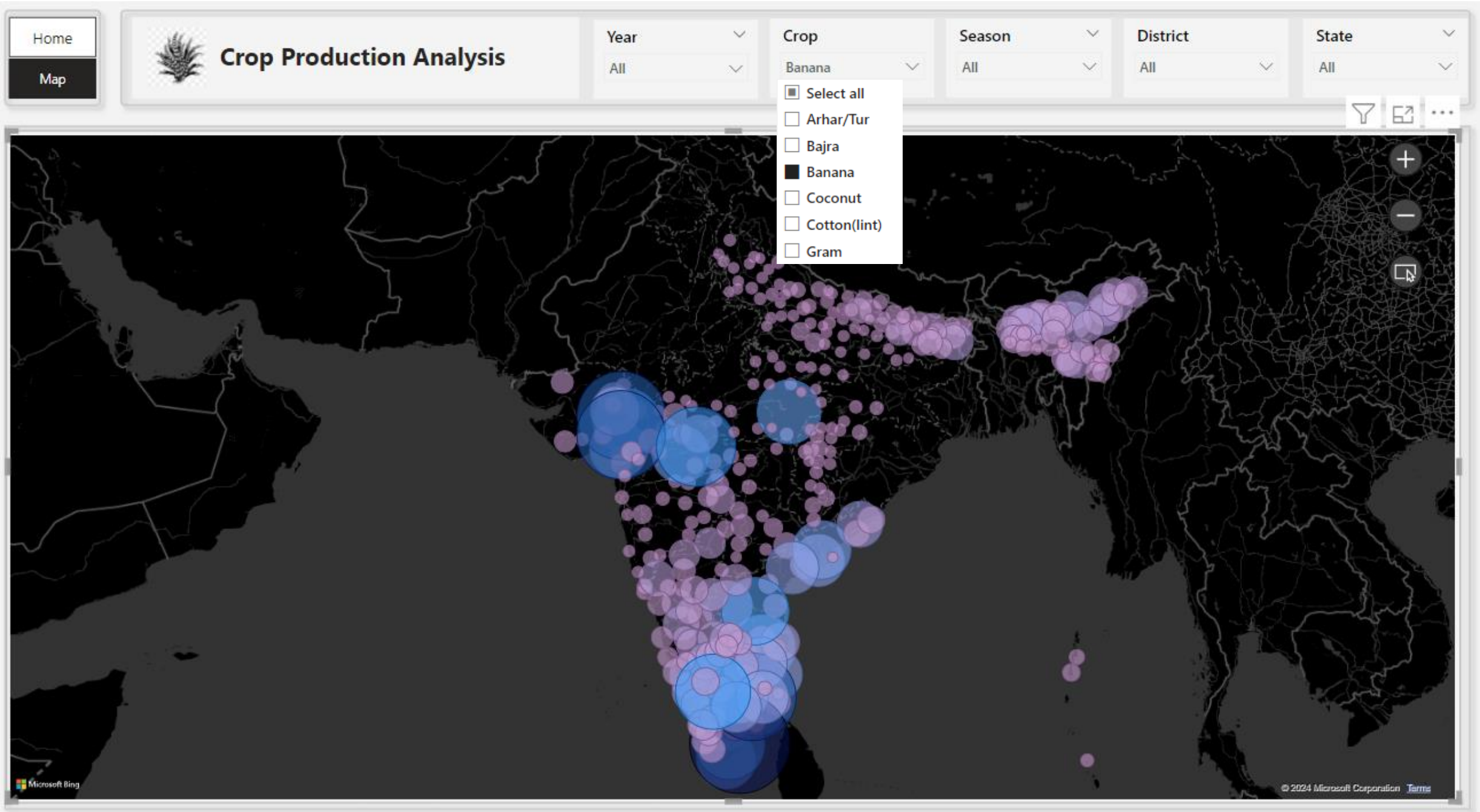
State: All

VADODARA

Production by Crop



Microsoft Bing


Home
Map
Crop Production Analysis
Year
All
Crop
Banana
Season
All
District
All
State
All
Select all
Arhar/Tur
Bajra
Banana
Coconut
Cotton(lint)
Gram
Microsoft Bing
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Conclusion

- **Diversification:** Explore diversifying crops to balance production across seasons and reduce dependency on a few key crops.
- **Technology Integration:** Utilize advanced agricultural technologies and practices to boost yields for the highest-producing crops.
- **Resource Management:** Improve resource allocation and management to enhance production efficiency for lesser-producing crops.
- **Market Analysis:** Conduct regular market analysis to align production with demand trends and optimize profit margins.
- **Sustainability Practices:** Implement sustainable farming practices to maintain long-term production capacity and environmental health.