Crop Production Analysis

Introduction

India is a major player in agriculture on the global stage, offers a fascinating landscape for under standing crop prediction, seasonal impacts, regional influences on yield, and the evolving trends in agricultural forecasting. The main objectives of this project include data exploration, visualization,
and addressing various analytical questions. So, join me on this exploration of Indian agriculture. Let's go!

What is Crop Production?

Crop production is the process of growing crops for domestic and commercial purposes. Some of the crops produced on a large scale include rice, wheat, maize, jute, etc.
Crop production is a common agricultural practice followed by worldwide farmers to grow and produce crops to use as food and fibre. This practice includes all the feed sources that are required to maintain and produce crops. Listed below are few practices used during crop production.

- Preparation of Soil.
- Sowing of Seeds.
- Irrigation.
- Application of manure, pesticides, and fertilizers to the crops.
- Protecting and Harvesting Crops.
- Storage and Preserving the produced Crops.

About The Data:

This dataset, holds a wealth of valuable information sourced from the Indian government's Area Production Statistics (APS) database. Maintained by the Ministry of Agriculture and Farmers Welfare, the APS database offers comprehensive and detailed data on crop production, yield, and cultivated areas across various states and districts in India.

Columns in dataset
State_Name
District_Name
Crop_Year
Season
Crop
Area
Production

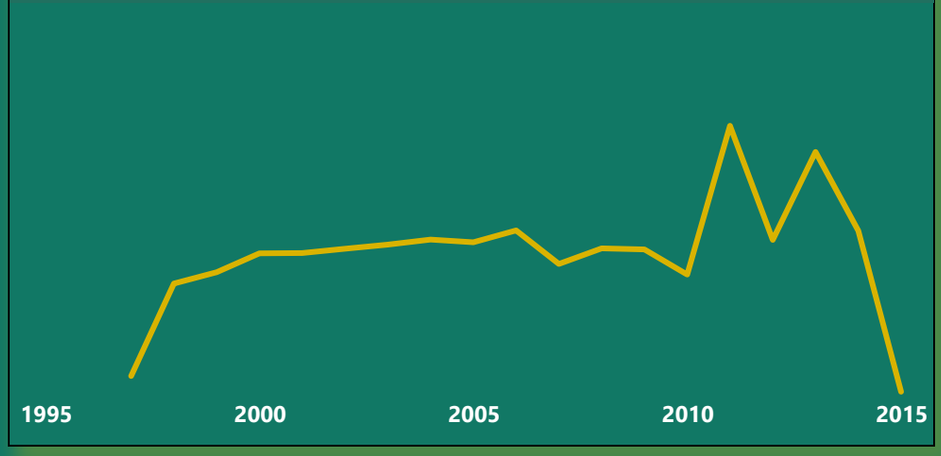
CROP PRODUCTION DASHBOARD

1997 2015

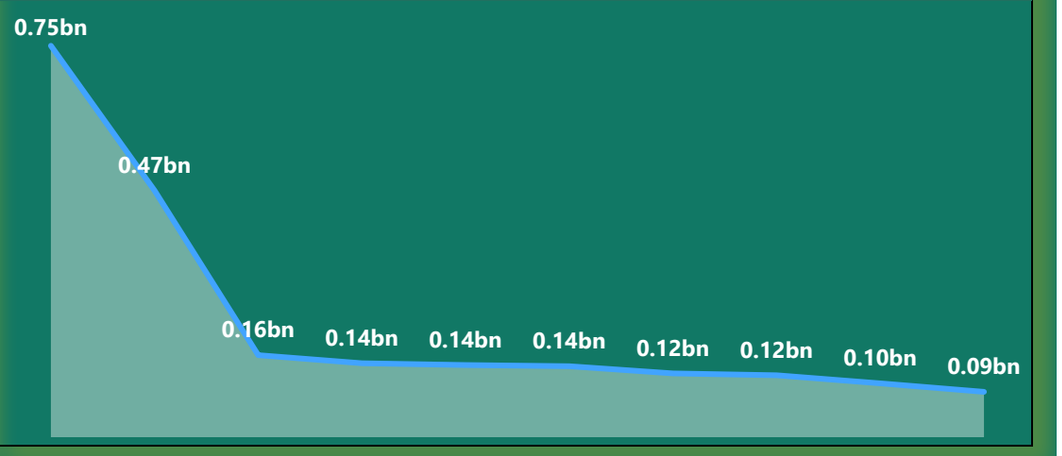
Select State
- Andaman an...
- Andhra Prad...
- Arunachal Pr...
- Assam
- Bihar
- Chandigarh

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

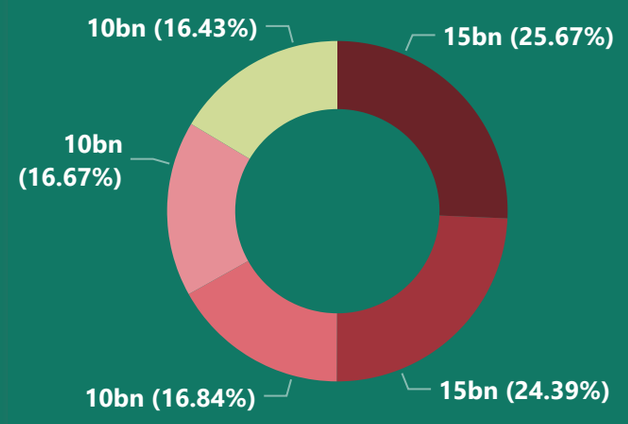
PRODUCTION PER YEAR



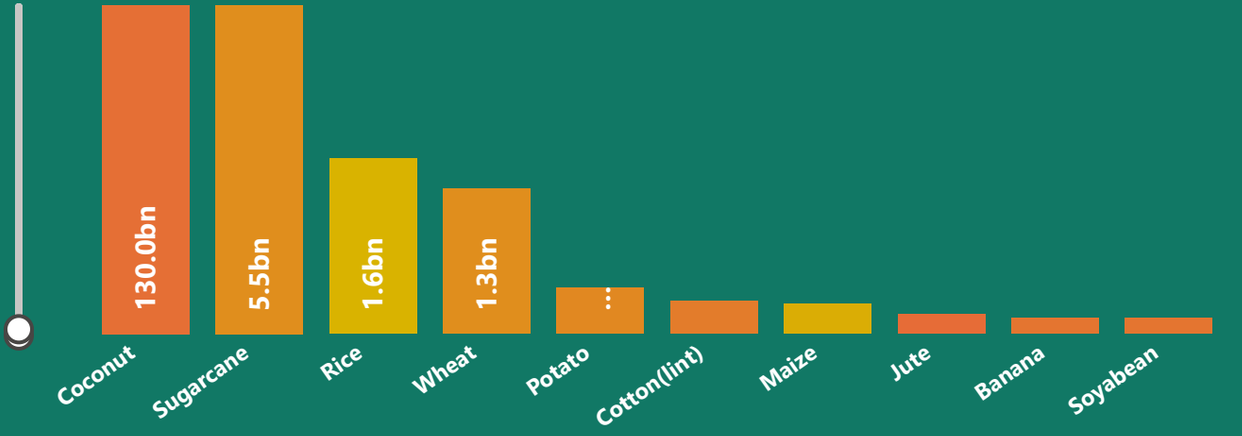
PRODUCTION AREA



TOP 5 PRODUCTION DISTRICTS



TOP 10 CROPS TOTAL PRODUCTION



STATE WISE CULTIVATION AND PRODUCTION ANALYSIS

State Name
All

District Name
All

Acres

2,953.79M

Sum of Area

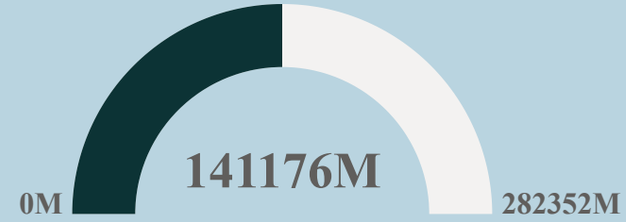
33

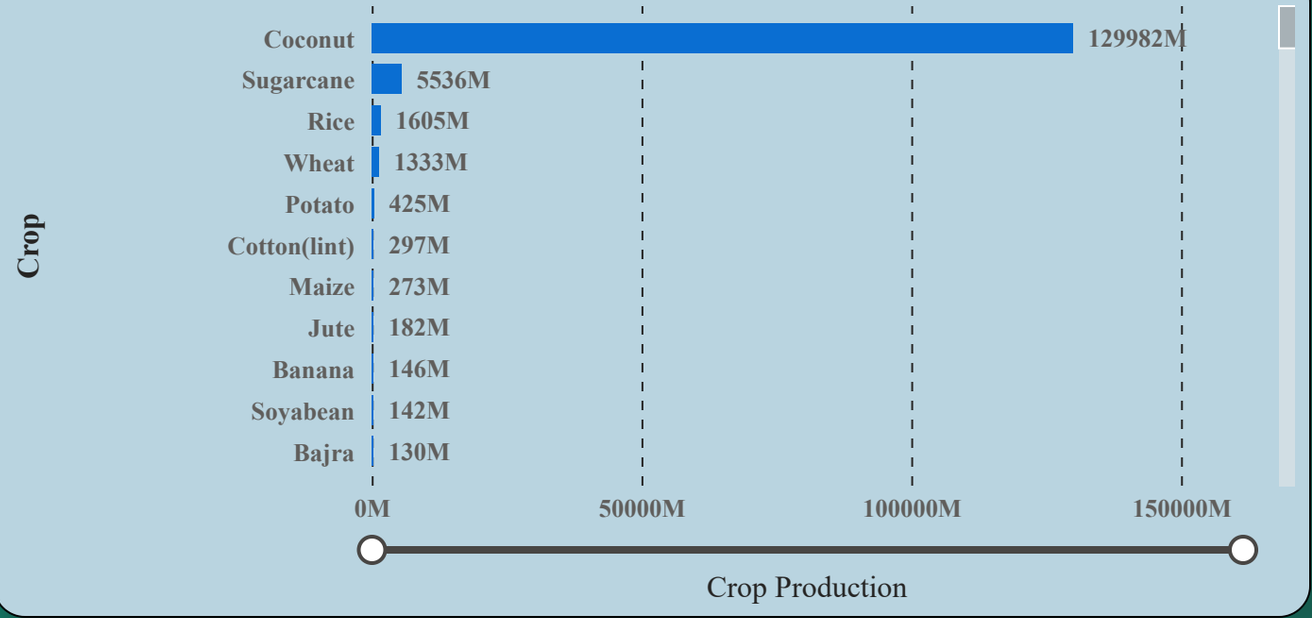
Count of State_Name

646

Count of District_Name

Tones





Season

Select all	Kharif	Summer	Winter
Autumn	Rabi	Whole Year	

Year

1997 2015

Conclusion

This project provides valuable insights into crop production patterns and trends. By exploring and visualizing the data, we have gained a better understanding of the most commonly grown crops, the distribution of crop production across seasons and states, and the highest production in different years. These insights can be utilized for decision-making, resource allocation, and future planning in the agricultural sector. Additionally, the project highlights the importance of data exploration, visualization, and analytical techniques in understanding and utilizing agricultural data effectively.

What factors control crop production?

The factors that control crop production include:

1. Temperature
2. Precipitation
3. Solar radiation
4. Wind velocity
5. Soil moisture

End project

By Rajesh Hinduja

THANK YOU!!