Crop Production Analysis in India

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Problem Statement

- The Agriculture business domain, as a vital part of the overall supply chain, is expected to highly evolve 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 facilitate the collaboration of numerous stakeholders belonging to associated business domains, in an effective and flexible manner. This dataset provides a huge amount of information on crop production in India ranging from 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. Make views and dashboards first and also make a story out of it.

Dataset

- State_Name
- District_Name
- Crop_Year
- Season
- Crop
- Area
- Production

Main KPI's

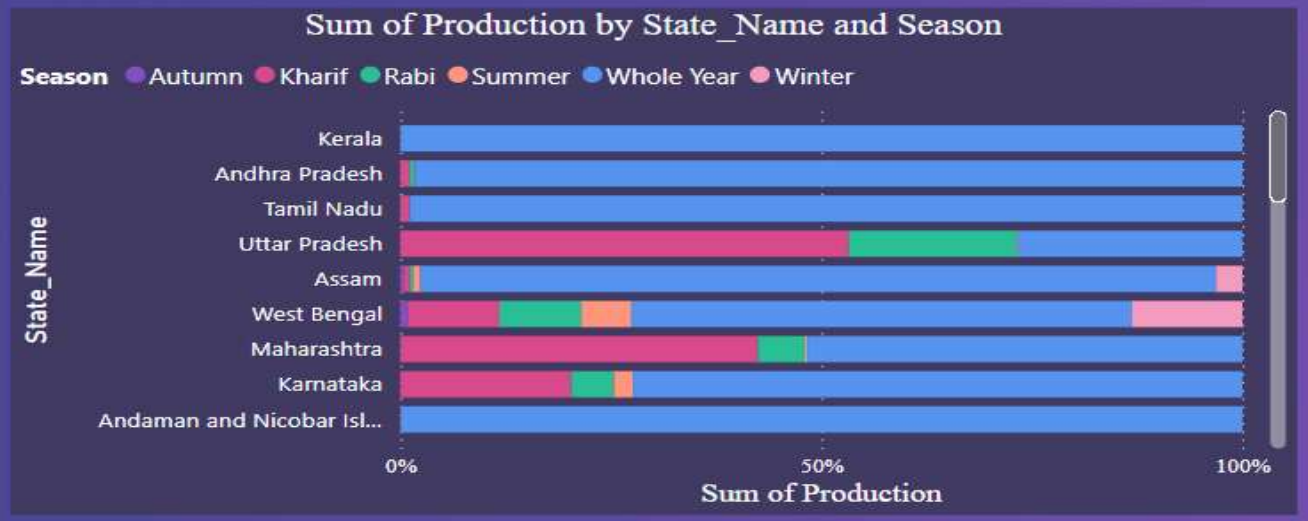
Tools and Techniques Used

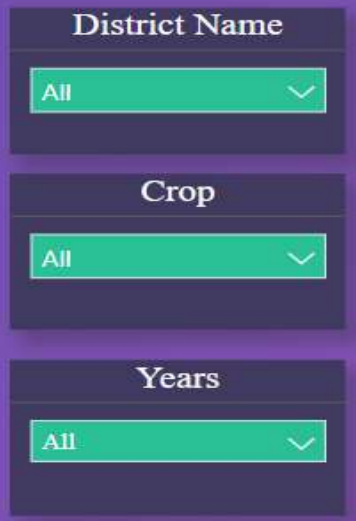
Power Query	• Data Cleaning • Data Transformation
Excel	• Data Analysis • Data Aggregation using Pivot Tables
Power BI	• Data Visualization • Dynamic Interactive Dashboard

Results

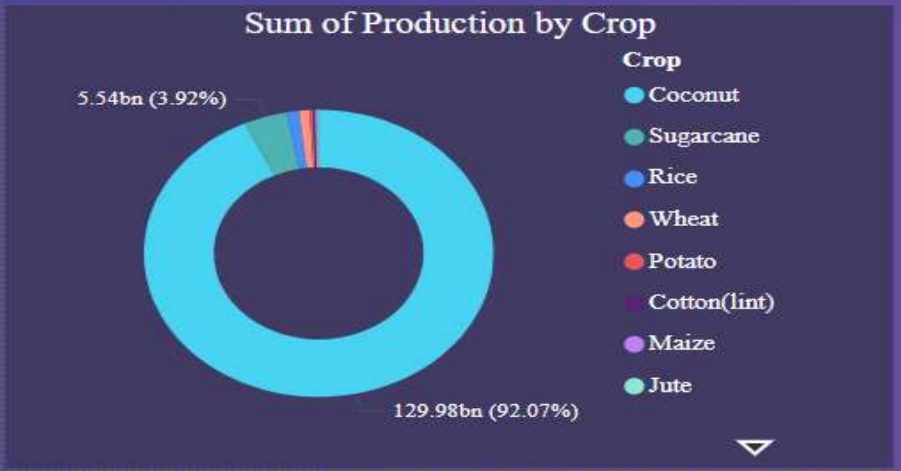
- The insights show a strong relationship between Crop Production and Seasons, with 59% of total crop production occurring during the Kharif season (June–October).
- There is a clear correlation between Crop Production and Year, showing an increase of 10% in 2011 and a 9% rise in 2013 compared to earlier years.
- The highest crop yields in India are from 92% Coconut, followed by 3.92% Sugarcane, and 1% each from Rice and Wheat, with other crops contributing to the remaining production.

Dashboard



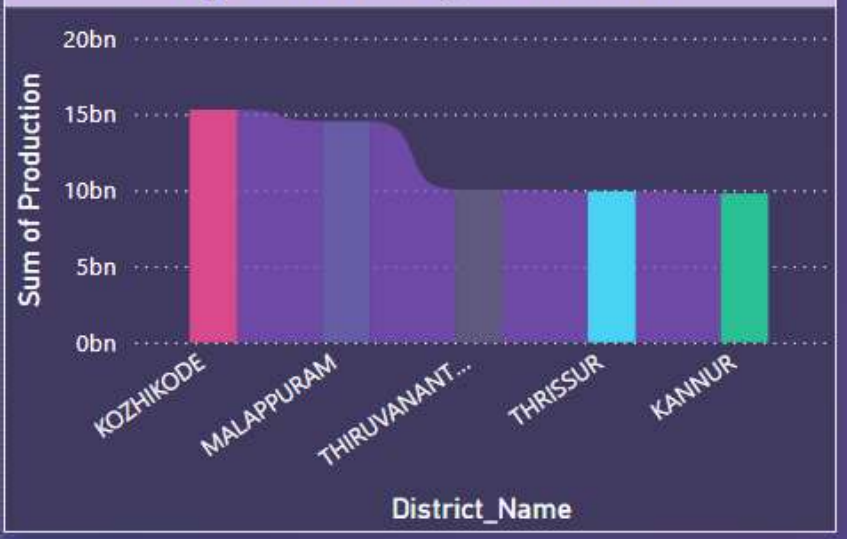


Crop Production Analysis



Crop Production Analysis

Top 5 District by Production



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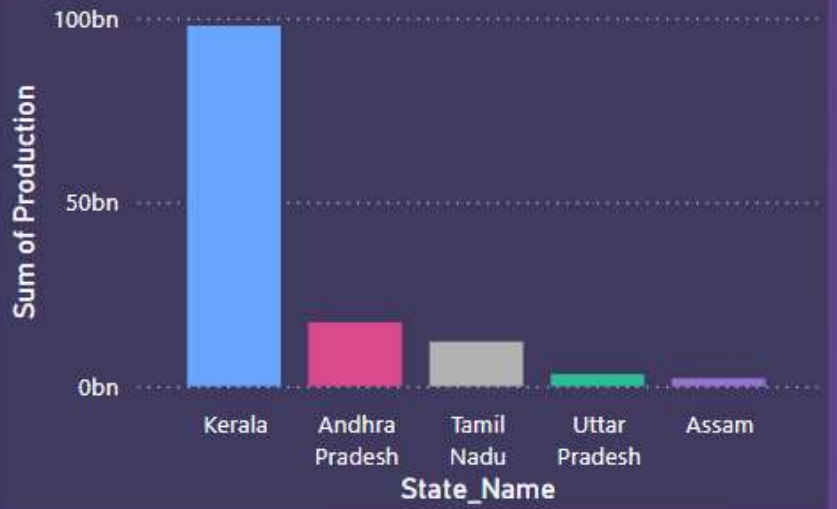
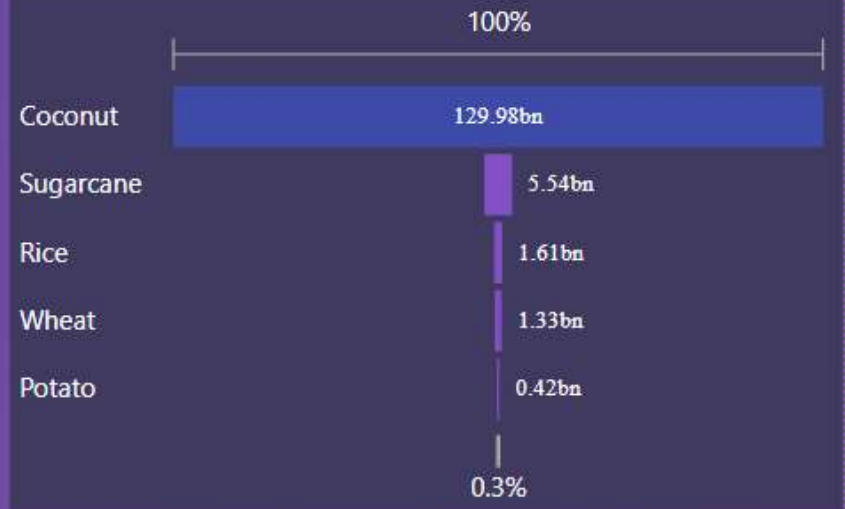
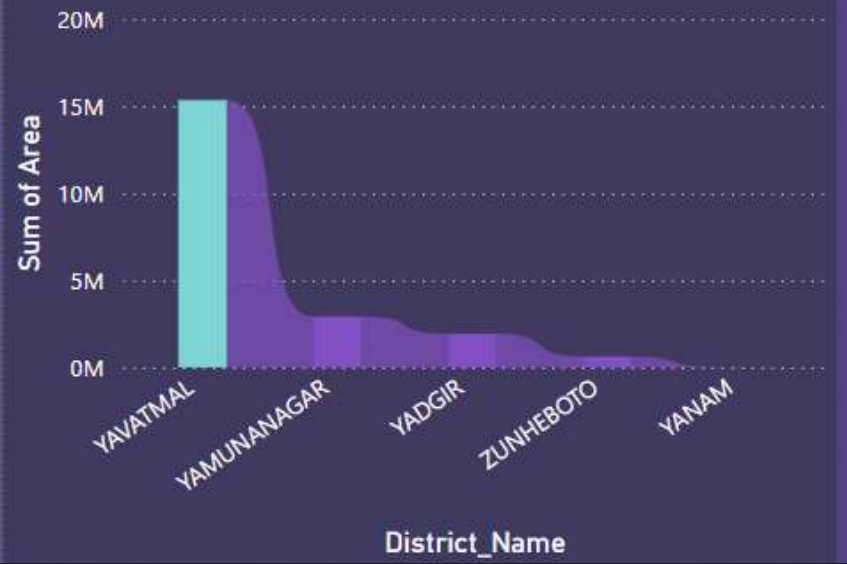


Top 5 Crops by Production



Top 5 District by Area



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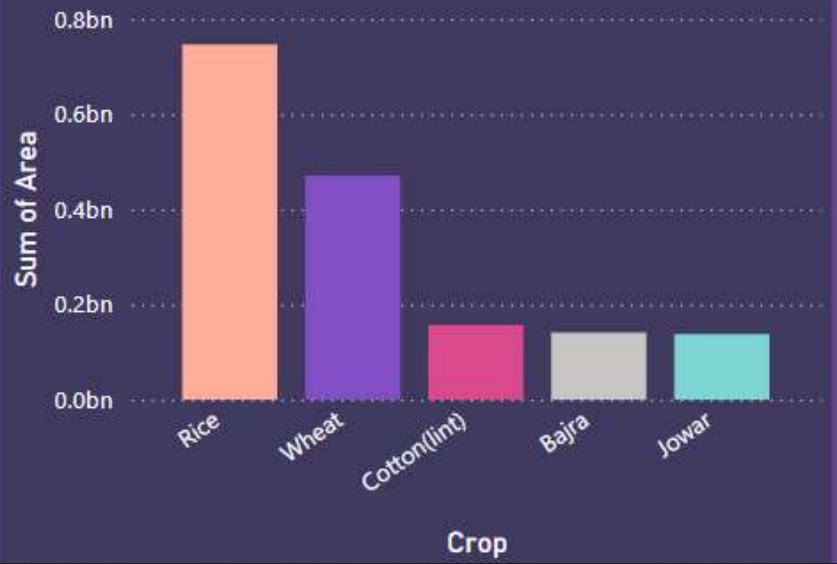

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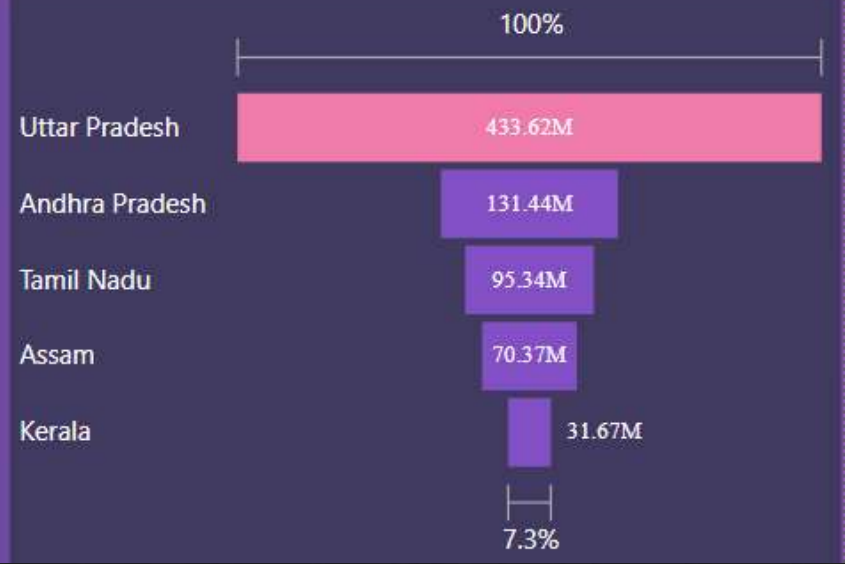

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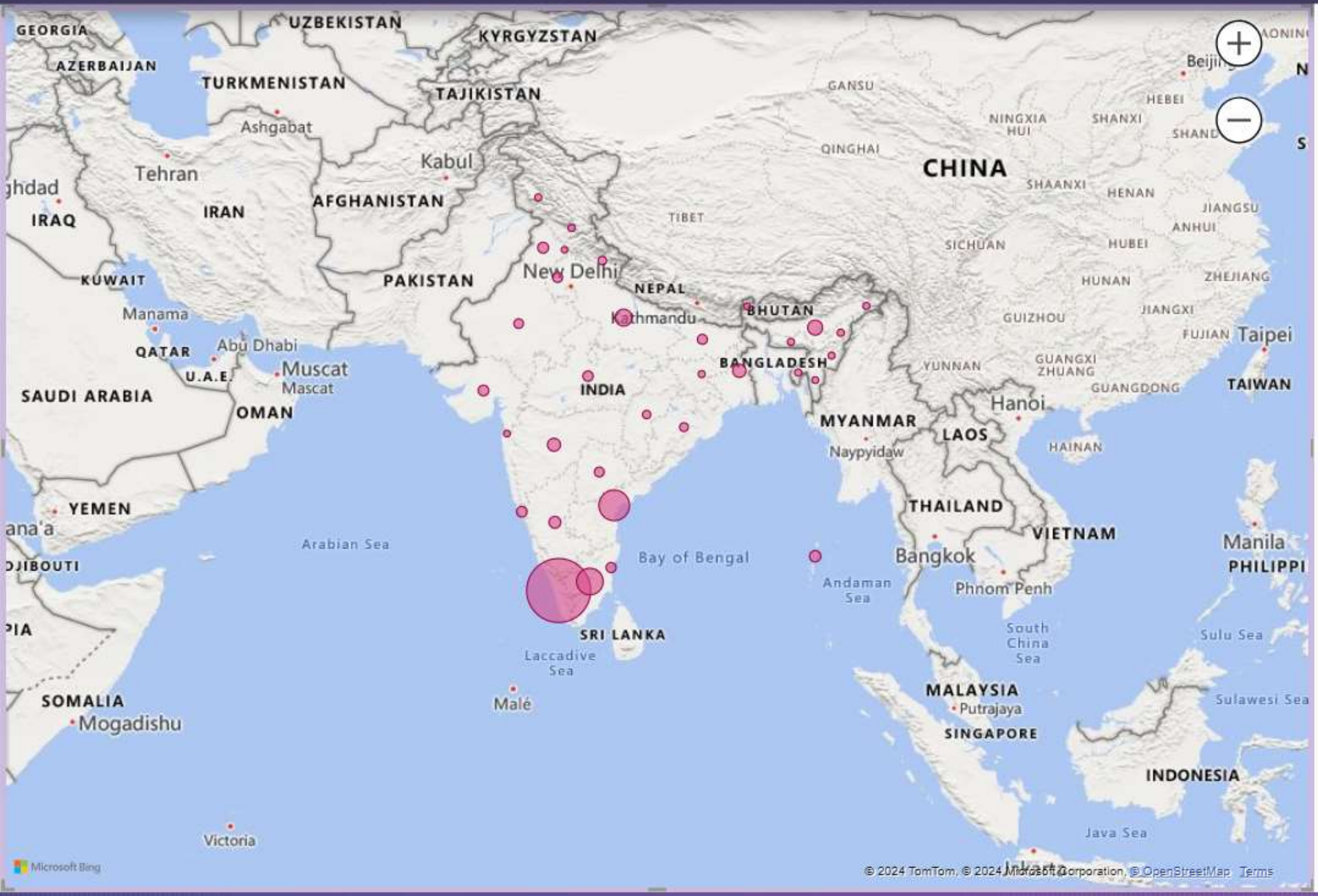

Ask a question about your data

Try one of these to get started

- top state names by total crops
- top state names by total districts
- what is the total crops by state name
- what is the total districts by state name
- top state names by total production by state

Show all suggestions

Crop Production Analysis

Percent of Area by State

State_Name	%GT Sum of Area
Uttar Pradesh	14.71%
Madhya Pradesh	11.18%
Maharashtra	10.93%
Rajasthan	9.11%
West Bengal	7.31%
Karnataka	6.88%
Gujarat	5.26%
Andhra Pradesh	4.46%
Bihar	4.35%
Punjab	4.30%
Odisha	3.73%
Tamil Nadu	3.23%
Haryana	3.03%
Chhattisgarh	2.81%
Telangana	2.76%
Assam	2.39%
Kerala	1.07%
Uttarakhand	0.64%
Total	**100.00%**

Percent of Production by State

State_Name	%GT Sum of Production
Kerala	69.33%
Andhra Pradesh	12.27%
Tamil Nadu	8.55%
Uttar Pradesh	2.29%
Assam	1.50%
West Bengal	0.99%
Maharashtra	0.90%
Karnataka	0.61%
Andaman and Nicobar Islands	0.51%
Punjab	0.42%
Gujarat	0.37%
Goa	0.36%
Madhya Pradesh	0.32%
Puducherry	0.27%
Haryana	0.27%
Bihar	0.26%
Telangana	0.24%
Rajasthan	0.20%
Total	**100.00%**

Deatiled Report

State_Name	District_Name	Sum of Area	Sum of Pr
Andaman and Nicobar Islands	NICOBARS	151,169.99	500,70
Andaman and Nicobar Islands	NORTH AND MIDDLE ANDAMAN	74,509.95	77,41
Andaman and Nicobar Islands	SOUTH ANDAMANS	111,403.46	140,1(
Andhra Pradesh	ANANTAPUR	18,467,375.00	81,5(
Andhra Pradesh	CHITTOOR	6,100,451.00	374,13
Andhra Pradesh	EAST GODAVARI	11,586,768.00	8,271,05
Andhra Pradesh	GUNTUR	13,716,215.00	84,7(
Andhra Pradesh	KADAPA	7,218,795.00	25,66
Andhra Pradesh	KRISHNA	11,127,407.00	369,42
Andhra Pradesh	KURNOOL	16,963,873.00	34,9(
Andhra Pradesh	PRAKASAM	9,608,612.00	37,7(
Andhra Pradesh	SPSR NELLORE	6,197,831.00	131,42
Andhra Pradesh	SRIKAKULAM	7,100,750.00	2,141,62
Andhra Pradesh	VISAKHAPATANAM	5,642,082.00	1,010,4
Andhra Pradesh	VIZIANAGARAM	6,514,735.00	474,16
Andhra Pradesh	WEST GODAVARI	11,197,290.00	4,287,72
Total		**2,947,831,968.25**	**141,176,1**

THANK YOU