

# India's Agricultural Crop Production Analysis(1997-2021)

**Overview**  
According to The World Bank, India is a global agricultural powerhouse. It is the world's largest producer of milk, pulses, and spices, and has the world's largest cattle herd (buffaloes), as well as the largest area under wheat, rice and cotton. It is the second largest producer of rice, wheat, cotton, sugarcane, farmed fish, sheep & goat meat, fruit, vegetables and tea.

**Source of Data**  
Data is open available on Kaggle which is made available Ministry of Agriculture and Farmers Welfare of India

While agriculture's share in India's economy has progressively declined to less than 15% due to the high growth rates of the industrial and services sectors, the sector's importance in India's economic and social fabric goes well beyond this indicator.

**Objective**  
Let us analyze the Indian Agriculture crop production for the data collected from 1997 to 2022. Let us ask interesting questions on existing data, get production and area statistics and understand more on the Indian Agriculture history for crop production.

**Exploratory data analysis**  
Let us get into the details with exploration of data to answer various questions. Let us place those general questions we want to get an answer from the data. Let us get some basic details like crops which are their in our records, states and districts we have in our records, etc.

**Dealing with various units of production**  
We can observe a column named Production units which is a measurement of crop production. We need to standardize the units to one specific unit to do proper measurement. Let us get the units we have in our dataset

Which crop is the most common choice for agriculture in India ?  
In [11]:  
agri\_df["Crop"].value\_counts().head()  
Out[11]:  
Rice 21175 Maize 20003  
Moong(Green Gram) 14722 Urad 14241 Sesamum 12788  
Name: Crop, dtype: int64  
Having found in more than 21 K records, Rice seems to be the most popular choice for farmers in India, followed by Mazie and Moong.

This report delves into the captivating realm of India's agricultural cultivation, providing a comprehensive visual exploration of key aspects and trends in the agricultural sector.

The agricultural growth rate has fallen to **3 per cent** in 2021-22 from 3.3 per cent in 2020-21, according to the Economic Survey Report 2022-23 tabled in the Parliament on January 31, 2023.

India's foodgrains production touched a record **315.7 million tonnes** in 2021-22 despite climate change challenges says the Economic Survey 2022-23 tabled in the Parliament by the Union Minister of Finance and Corporate Affairs Smt.

Through the visual representations, readers can gain valuable insights into crop production, seasonal variations, regional distribution, and overall production trends.

These visualizations enable intuitive analysis, allowing stakeholders to uncover patterns, identify areas of growth or concern, and make data-driven decisions.