

SPRINT – 1

WORKING WITH THE DATASET(UNDERSTANDING THE DATASET)

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Team ID	PNT2022TMID44400
Project Name	Estimate The Crop Yield Using Data Analytics

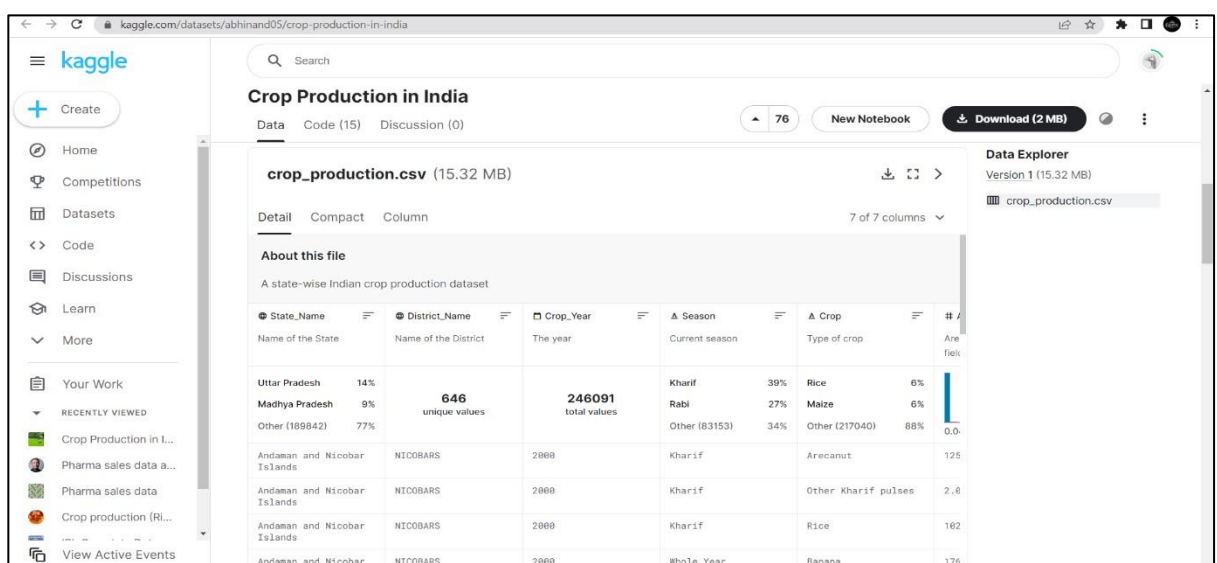
“Estimate The Crop Yield Using Data Analytics” project is based on understanding the crop production of India. Download the dataset from the below link. It has 2,46,092 data points (rows) and 6 features (columns) describing each crop production related details.

Dataset Link : [Dataset](#)

Let's understand the data we're working with and give a brief overview of what each feature represents or should represent

1. State Name - All the Indian State names.
2. District Name - Different District names.
3. Crop Year- contains the crop years.
4. Season - Different seasons for crop production.
5. Area - Total number of areas covered.
6. Production - production of crops.

UNDERSTAND THE DATASET:



The screenshot shows the Kaggle dataset page for 'Crop Production in India'. The dataset is named 'crop_production.csv' and is 15.32 MB in size. It has 76 data points. The page includes a sidebar with navigation options like Home, Competitions, Datasets, Code, Discussions, Learn, and More. The main content area shows the dataset details, including a table with columns: State_Name, District_Name, Crop_Year, Season, Crop, and Area. The table lists data for various states and districts, including Uttar Pradesh, Madhya Pradesh, and Andaman and Nicobar Islands. The 'Area' column shows values like 14%, 9%, 77%, 125, 2.8, 162, and 176. The 'Crop' column lists crops like Rice, Maize, Other Kharif pulses, and Banana. The 'Season' column lists seasons like Kharif, Rabi, and Whole Year. The 'Crop_Year' column lists years like 2000 and 2001. The 'District_Name' column lists districts like NIOBARS. The 'State_Name' column lists states like Uttar Pradesh, Madhya Pradesh, and Andaman and Nicobar Islands. The 'Area' column shows values like 14%, 9%, 77%, 125, 2.8, 162, and 176. The 'Crop' column lists crops like Rice, Maize, Other Kharif pulses, and Banana. The 'Season' column lists seasons like Kharif, Rabi, and Whole Year. The 'Crop_Year' column lists years like 2000 and 2001. The 'District_Name' column lists districts like NIOBARS. The 'State_Name' column lists states like Uttar Pradesh, Madhya Pradesh, and Andaman and Nicobar Islands.

State_Name	District_Name	Crop_Year	Season	Crop	Area
Uttar Pradesh	14%				
Madhya Pradesh	9%	646 unique values			
Other (189842)	77%	246091 total values			
Andaman and Nicobar Islands	NIOBARS	2000	Kharif	Areca nut	125
Andaman and Nicobar Islands	NIOBARS	2000	Kharif	Other Kharif pulses	2.8
Andaman and Nicobar Islands	NIOBARS	2000	Kharif	Rice	162
Andaman and Nicobar Islands	NIOBARS	2000	Whole Year	Banana	176

- Download the dataset from the given dataset link.
- Data Given in csv file is understood.
- The data format is as shown in the below image:

State Name	District Name	Crop Year	Season	Crop	Area	Production
Andaman	NICOBARS	2000	Kharif	Areca nut	1254	2000
Andaman	NICOBARS	2000	Kharif	Other Kha	2	1
Andaman	NICOBARS	2000	Kharif	Rice	102	321
Andaman	NICOBARS	2000	Whole Year	Banana	176	641
Andaman	NICOBARS	2000	Whole Year	Cashew nut	720	165
Andaman	NICOBARS	2000	Whole Year	Coconut	18168	65100000
Andaman	NICOBARS	2000	Whole Year	Dry ginger	36	100
Andaman	NICOBARS	2000	Whole Year	Sugarcane	1	2
Andaman	NICOBARS	2000	Whole Year	Sweet potato	5	15
Andaman	NICOBARS	2000	Whole Year	Tapioca	40	169
Andaman	NICOBARS	2001	Kharif	Areca nut	1254	2061
Andaman	NICOBARS	2001	Kharif	Other Kha	2	1
Andaman	NICOBARS	2001	Kharif	Rice	83	300
Andaman	NICOBARS	2001	Whole Year	Cashew nut	719	192
Andaman	NICOBARS	2001	Whole Year	Coconut	18190	64430000
Andaman	NICOBARS	2001	Whole Year	Dry ginger	46	100
Andaman	NICOBARS	2001	Whole Year	Sugarcane	1	1
Andaman	NICOBARS	2001	Whole Year	Sweet potato	11	33
Andaman	NICOBARS	2002	Kharif	Rice	189.2	510.84
Andaman	NICOBARS	2002	Whole Year	Areca nut	1258	2083
Andaman	NICOBARS	2002	Whole Year	Banana	213	1278
Andaman	NICOBARS	2002	Whole Year	Black pepper	62	12.5