Week 1 Assessment

Exhaustive Analysis of Indian Agriculture using Power BI

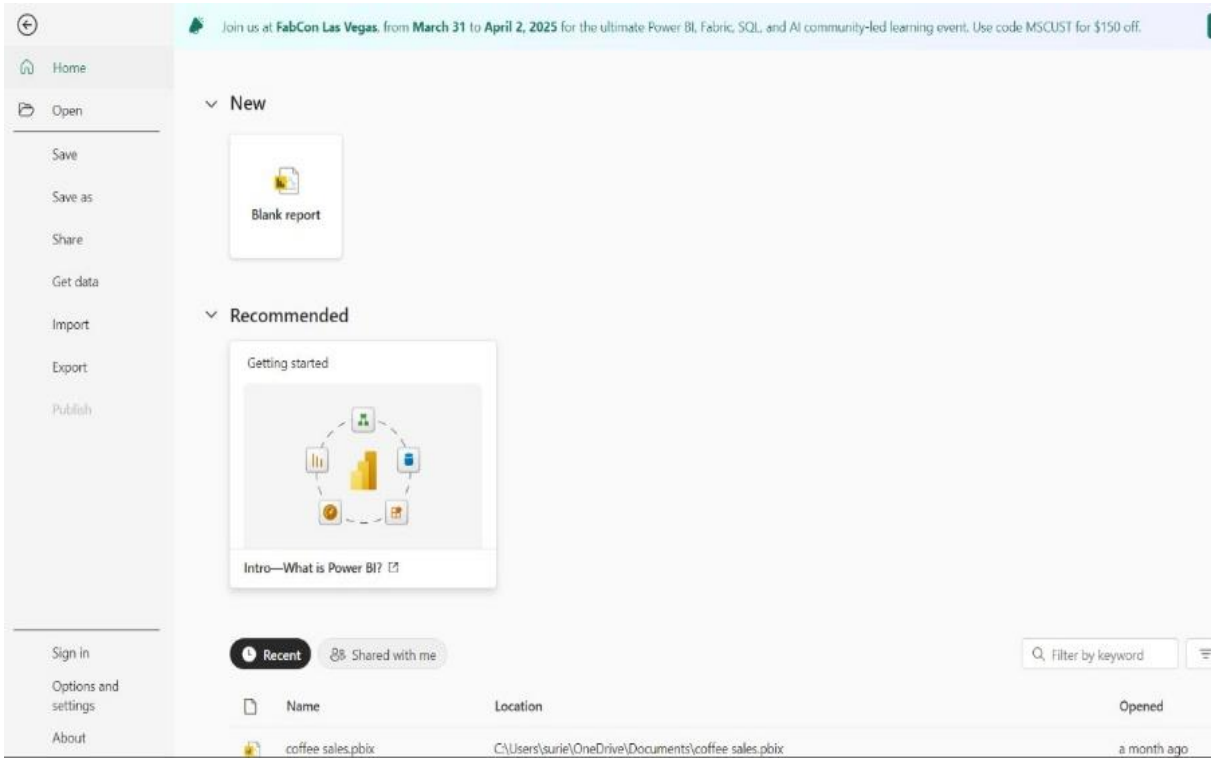
ETL – Extract Transform Load

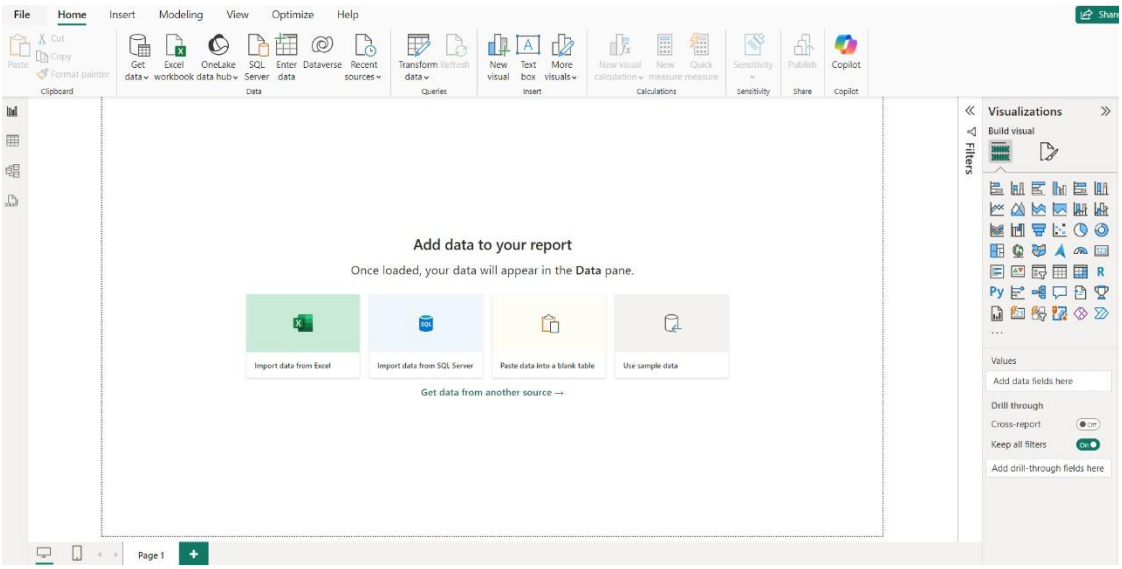
Extract – Pull data from data source like Excel, CSV, text, database file.

Transform – data processing, data cleaning.

Load – For analysis.

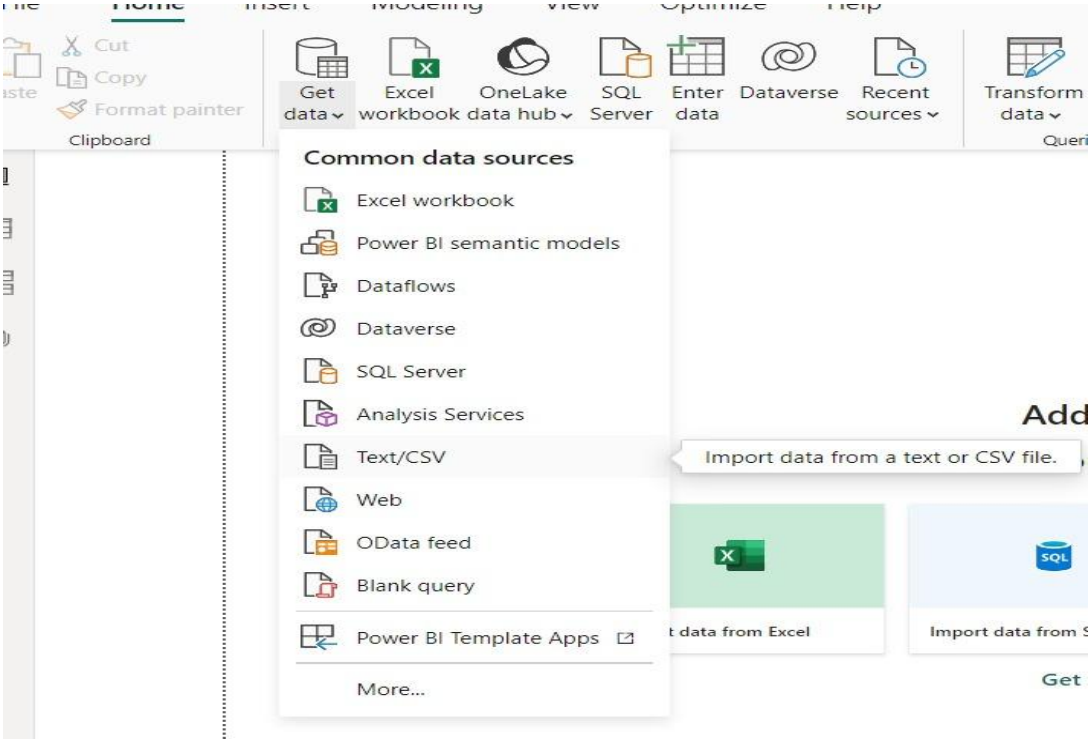
Analysis – keep facts, insights via Dashboard



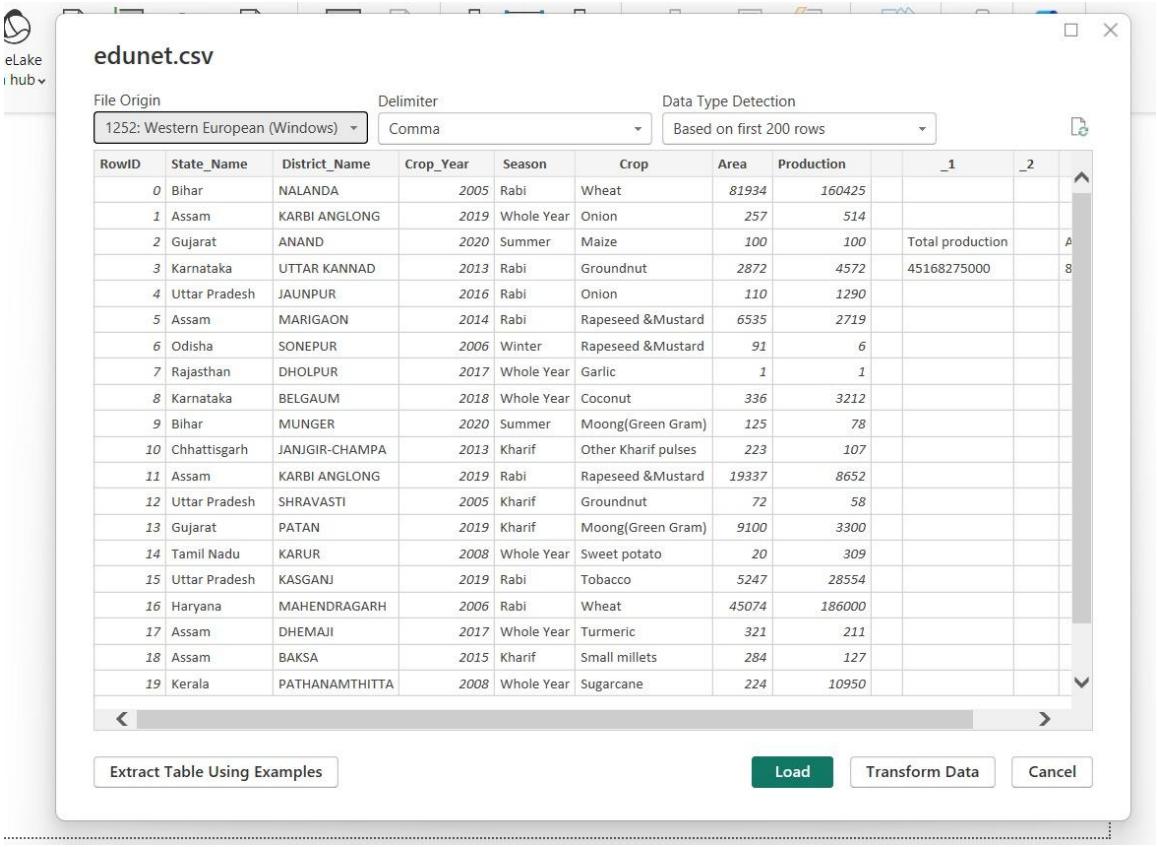


TEXT/CSV File –

(Commas Separate Value)



Transform – When you want to process the data



RowID	State_Name	District_Name	Crop_Year	Season	Crop	Area	Production	_1	_2
0	Bihar	NALANDA	2005	Rabi	Wheat	81934	160425		
1	Assam	KARBI ANGLONG	2019	Whole Year	Onion	257	514		
2	Gujarat	ANAND	2020	Summer	Maize	100	100	Total production	
3	Karnataka	UTTAR KANNAD	2013	Rabi	Groundnut	2872	4572	45168275000	
4	Uttar Pradesh	JAUNPUR	2016	Rabi	Onion	110	1290		
5	Assam	MARIGAON	2014	Rabi	Rapeseed &Mustard	6535	2719		
6	Odisha	SONEPUR	2006	Winter	Rapeseed &Mustard	91	6		
7	Rajasthan	DHOLPUR	2017	Whole Year	Garlic	1	1		
8	Karnataka	BELGAUM	2018	Whole Year	Coconut	336	3212		
9	Bihar	MUNGER	2020	Summer	Moong(Green Gram)	125	78		
10	Chhattisgarh	JANJGIR-CHAMPA	2013	Kharif	Other Kharif pulses	223	107		
11	Assam	KARBI ANGLONG	2019	Rabi	Rapeseed &Mustard	19337	8652		
12	Uttar Pradesh	SHRAVASTI	2005	Kharif	Groundnut	72	58		
13	Gujarat	PATAN	2019	Kharif	Moong(Green Gram)	9100	3300		
14	Tamil Nadu	KARUR	2008	Whole Year	Sweet potato	20	309		
15	Uttar Pradesh	KASGANJ	2019	Rabi	Tobacco	5247	28554		
16	Haryana	MAHENDRAGARH	2006	Rabi	Wheat	45074	186000		
17	Assam	DHEMAJI	2017	Whole Year	Turmeric	321	211		
18	Assam	BAKSA	2015	Kharif	Small millets	284	127		
19	Kerala	PATHANAMTHITTA	2008	Whole Year	Sugarcane	224	10950		

Project - To create the Dashboard

Report view We perform all visualization

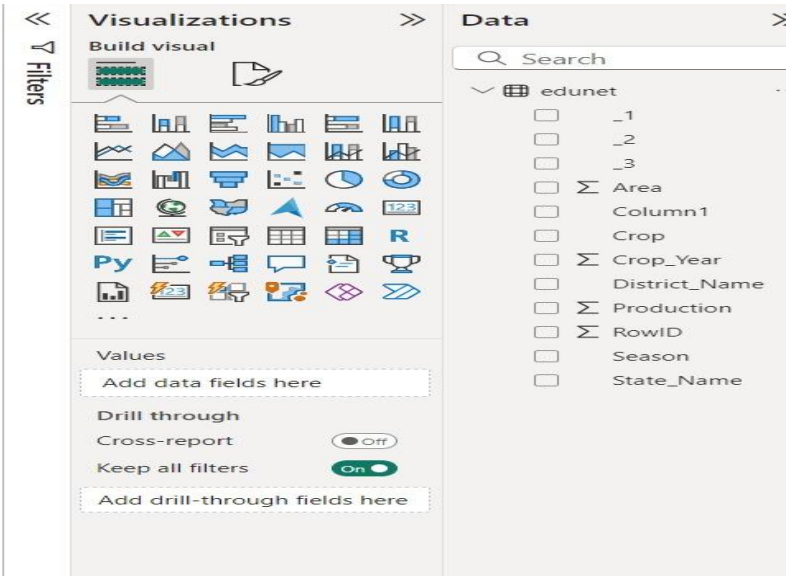
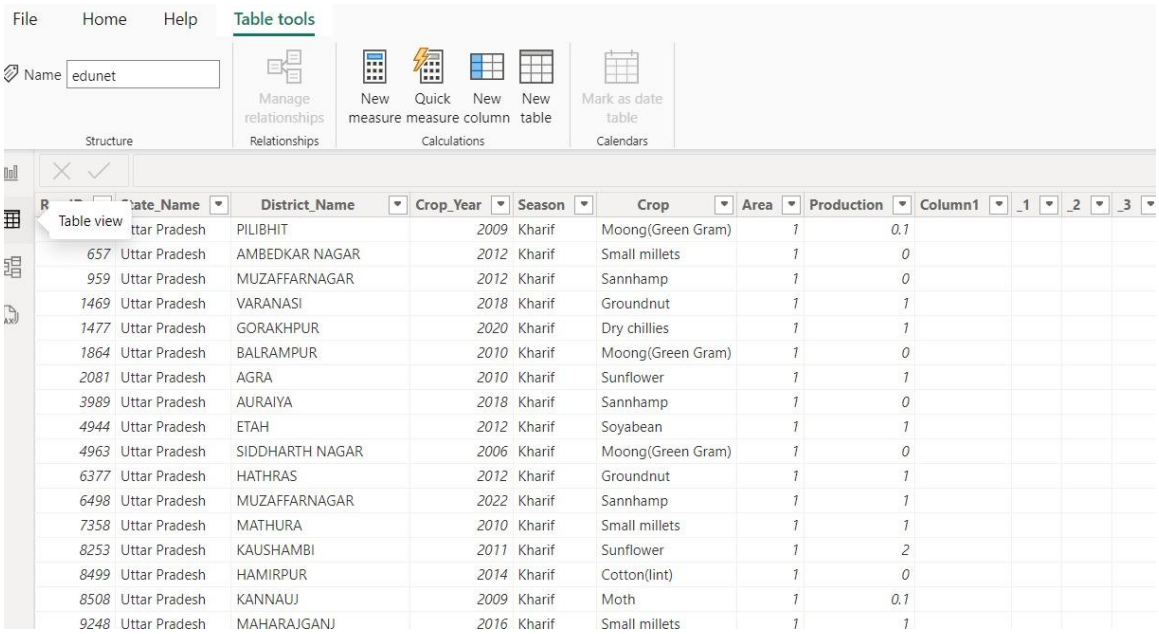
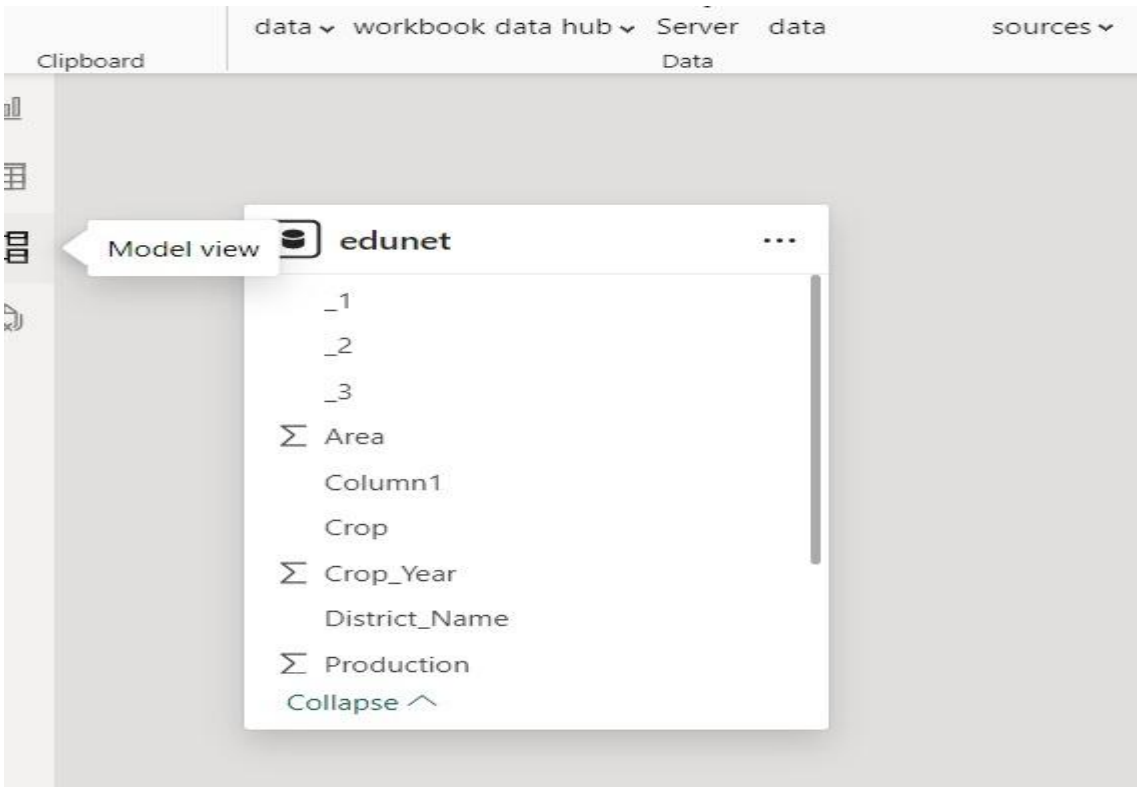


Table view – Overview of all data



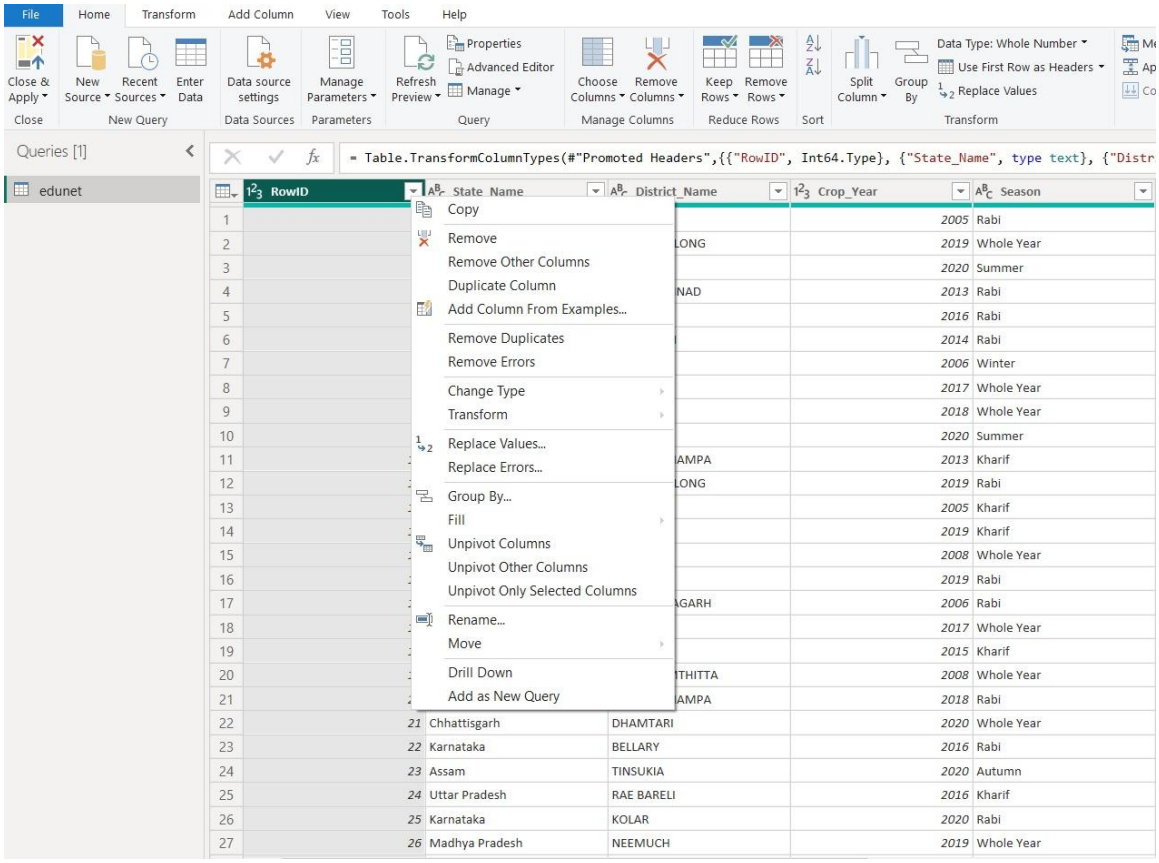
ate_Name	District_Name	Crop_Year	Season	Crop	Area	Production	Column1	_1	_2	_3
ttar Pradesh	PILIBHIT	2009	Kharif	Moong(Green Gram)	1	0.1				
657 Uttar Pradesh	AMBEDKAR NAGAR	2012	Kharif	Small millets	1	0				
959 Uttar Pradesh	MUZAFFARNAGAR	2012	Kharif	Sannhamp	1	0				
1469 Uttar Pradesh	VARANASI	2018	Kharif	Groundnut	1	1				
1477 Uttar Pradesh	GORAKHPUR	2020	Kharif	Dry chillies	1	1				
1864 Uttar Pradesh	BALRAMPUR	2010	Kharif	Moong(Green Gram)	1	0				
2081 Uttar Pradesh	AGRA	2010	Kharif	Sunflower	1	1				
3989 Uttar Pradesh	AURAIYA	2018	Kharif	Sannhamp	1	0				
4944 Uttar Pradesh	ETAH	2012	Kharif	Soyabean	1	1				
4963 Uttar Pradesh	SIDDHARTH NAGAR	2006	Kharif	Moong(Green Gram)	1	0				
6377 Uttar Pradesh	HATHRAS	2012	Kharif	Groundnut	1	1				
6498 Uttar Pradesh	MUZAFFARNAGAR	2022	Kharif	Sannhamp	1	1				
7358 Uttar Pradesh	MATHURA	2010	Kharif	Small millets	1	1				
8253 Uttar Pradesh	KAUSHAMBI	2011	Kharif	Sunflower	1	2				
8499 Uttar Pradesh	HAMIRPUR	2014	Kharif	Cotton(lint)	1	0				
8508 Uttar Pradesh	KANNAUJ	2009	Kharif	Moth	1	0.1				
9248 Uttar Pradesh	MAHARAJGANJ	2016	Kharif	Small millets	1	1				

Model view



Transform data – Use the Power query editor to connect, prepare, and transform data.

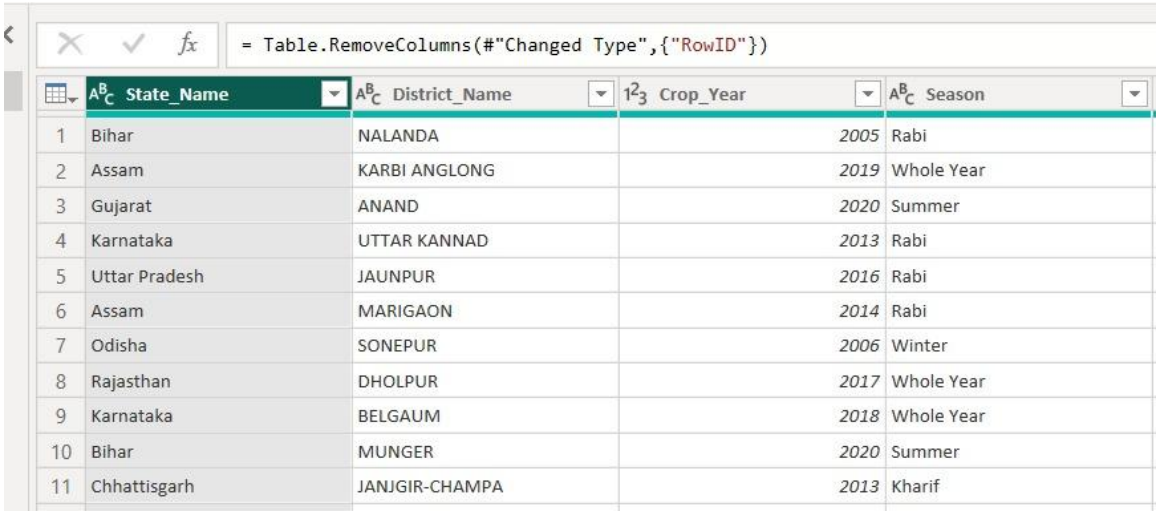
Power query



Right click on column to apply changes and to remove the null values

Check out the query settings

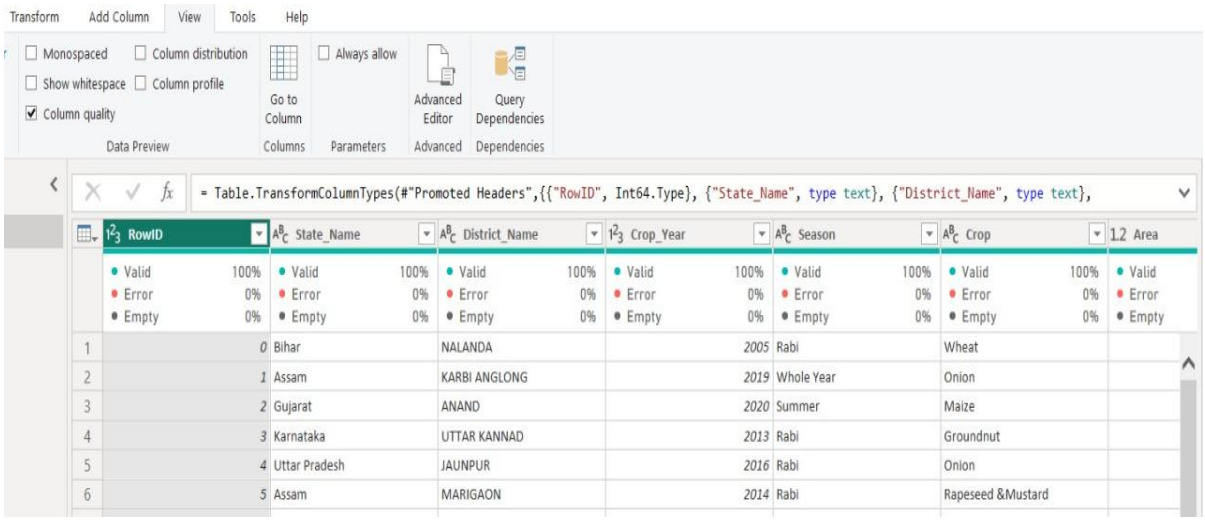
Change will be applied



	State_Name	District_Name	Crop_Year	Season
1	Bihar	NALANDA	2005	Rabi
2	Assam	KARBI ANGLONG	2019	Whole Year
3	Gujarat	ANAND	2020	Summer
4	Karnataka	UTTAR KANNAD	2013	Rabi
5	Uttar Pradesh	JAUNPUR	2016	Rabi
6	Assam	MARIGAON	2014	Rabi
7	Odisha	SONEPUR	2006	Winter
8	Rajasthan	DHOLPUR	2017	Whole Year
9	Karnataka	BELGAUM	2018	Whole Year
10	Bihar	MUNGER	2020	Summer
11	Chhattisgarh	JANJGIR-CHAMPA	2013	Kharif

Go to VIEW TAB in power query

To check column quality



	RowID	State_Name	District_Name	Crop_Year	Season	Crop	Area
1	0	Bihar	NALANDA	2005	Rabi	Wheat	
2	1	Assam	KARBI ANGLONG	2019	Whole Year	Onion	
3	2	Gujarat	ANAND	2020	Summer	Maize	
4	3	Karnataka	UTTAR KANNAD	2013	Rabi	Groundnut	
5	4	Uttar Pradesh	JAUNPUR	2016	Rabi	Onion	
6	5	Assam	MARIGAON	2014	Rabi	Rapeseed &Mustard	

Remove columns / Rows

Remove Duplicates

Close and apply – For apply changes that will be reflected