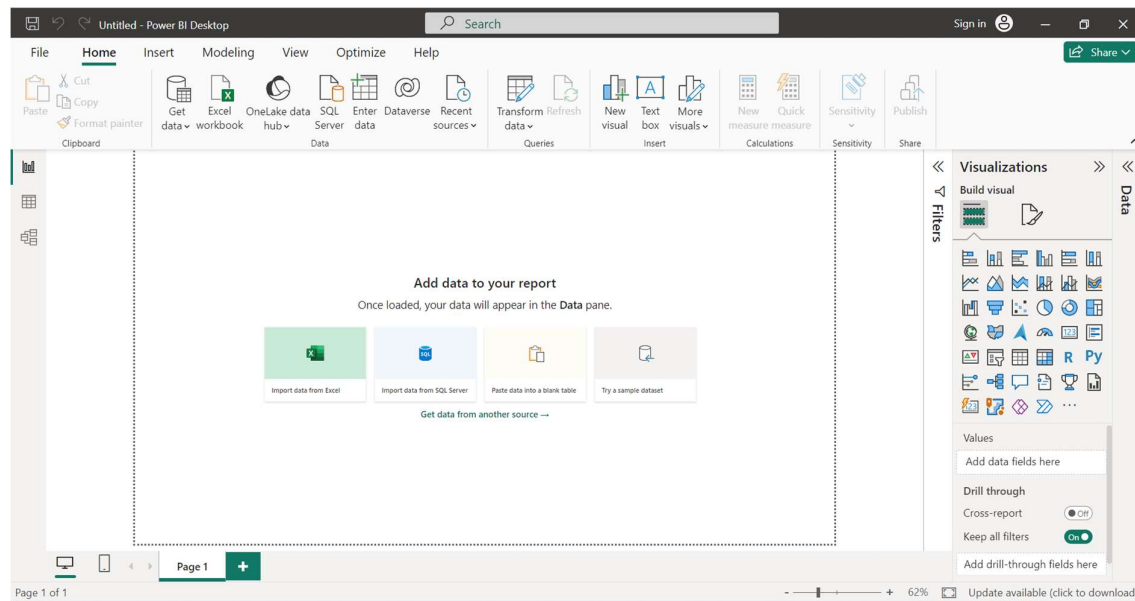


P1-Exhaustive Analysis of Indian Agriculture Sector Using Power BI

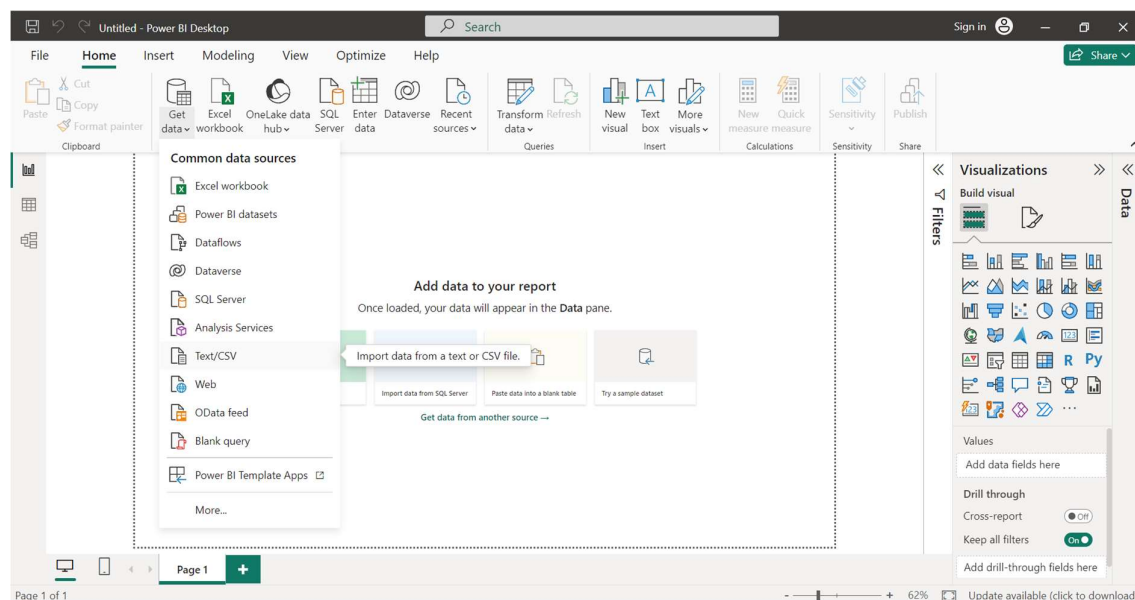
1.Power BI Desktop:

Open the Power BI Desktop

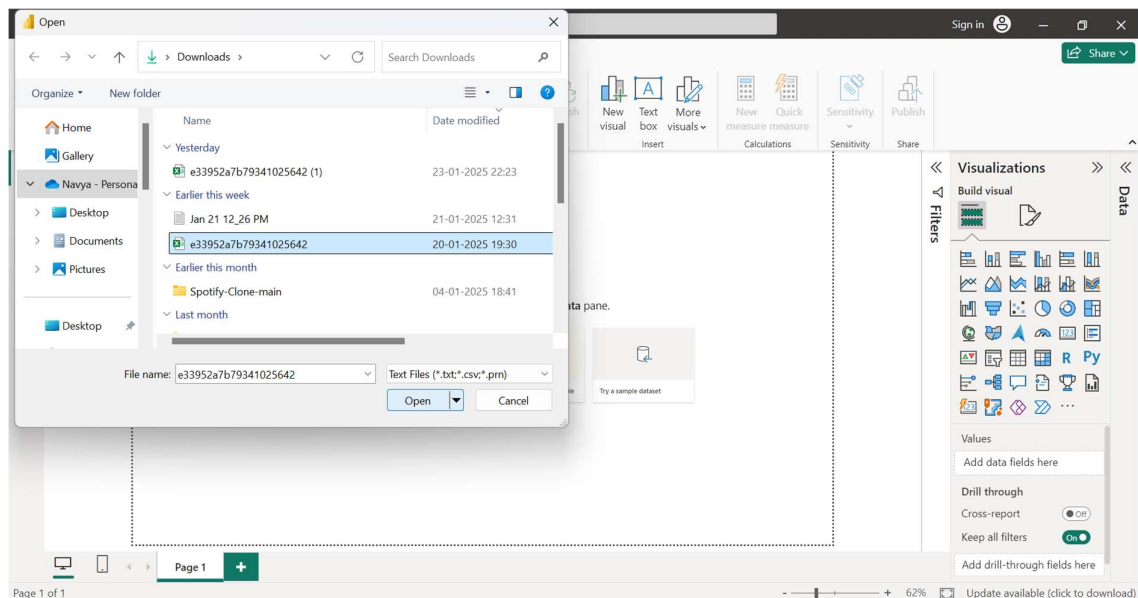


2. ETL-Extract Transform Load

i)Extract-pull data from data source like excel, csv, text, database file as shown below.

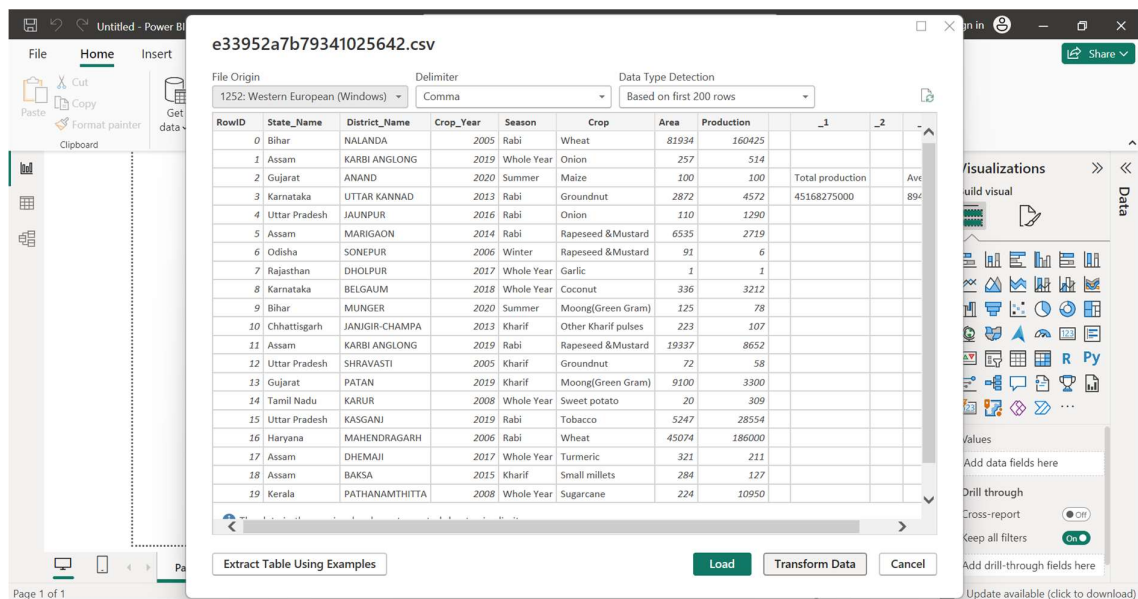


And open the file by clicking on open



ii) Transform- click on it to perform data processing, data cleaning

iii) Load- click on it for analysis and load when your data is cleaned



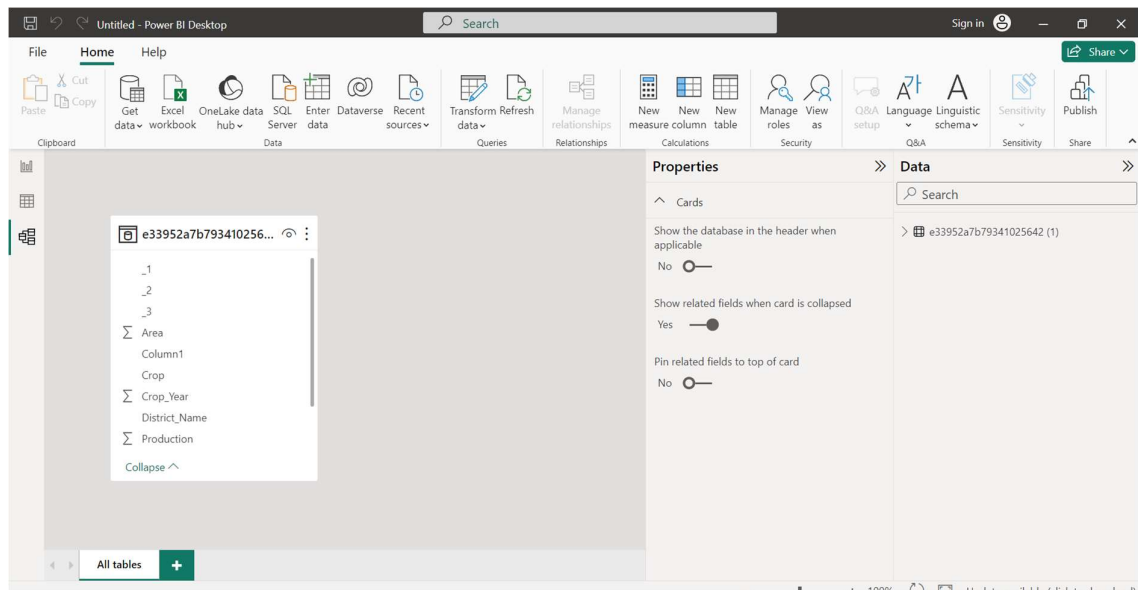
3. Table view

After we can load the data then by clicking the table view we can view the data.

RowID	State_Name	District_Name	Crop_Year	Season	Crop	Area	Production	Column1	_1	_2	_3
48	Uttar 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	KANNAULI	2009	Kharif	Moth	1	0.1				
9248	Uttar Pradesh	MAHARAJGANJ	2016	Kharif	Small millets	1	1				
9773	Uttar Pradesh	BALRAMPUR	2008	Kharif	Moong(Green Gram)	1	1				
9775	Uttar Pradesh	CHANDAULI	2014	Kharif	Small millets	1	1				
11191	Uttar Pradesh	GONDA	2015	Kharif	Sannhamp	1	0				
11891	Uttar Pradesh	CHANDAULI	2012	Kharif	Small millets	1	0				

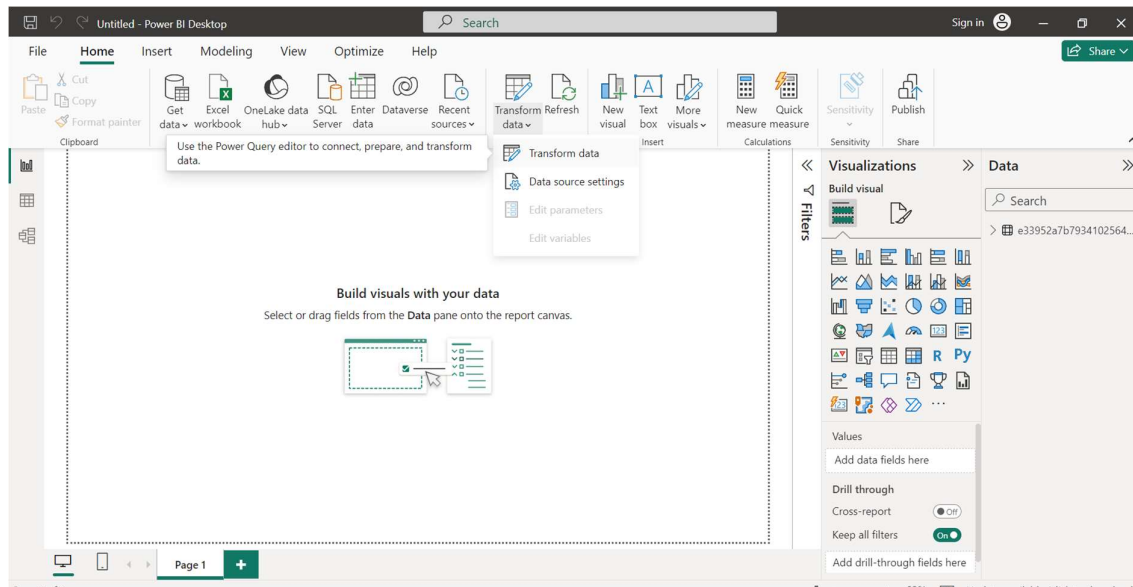
4.Model view

Model view is used when we want to create relationship among data.

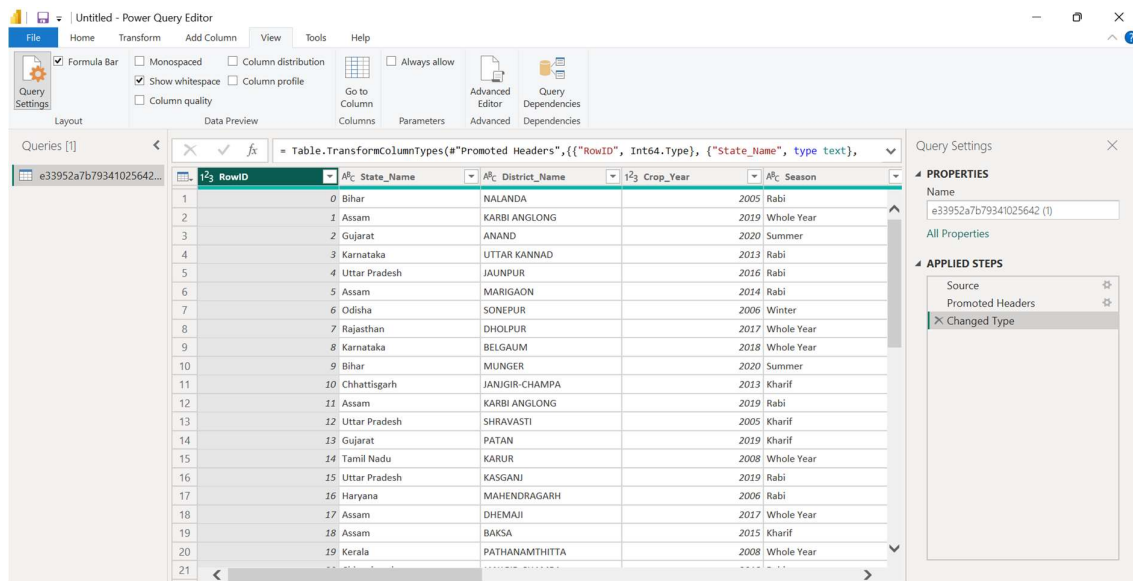


5.Transforming data

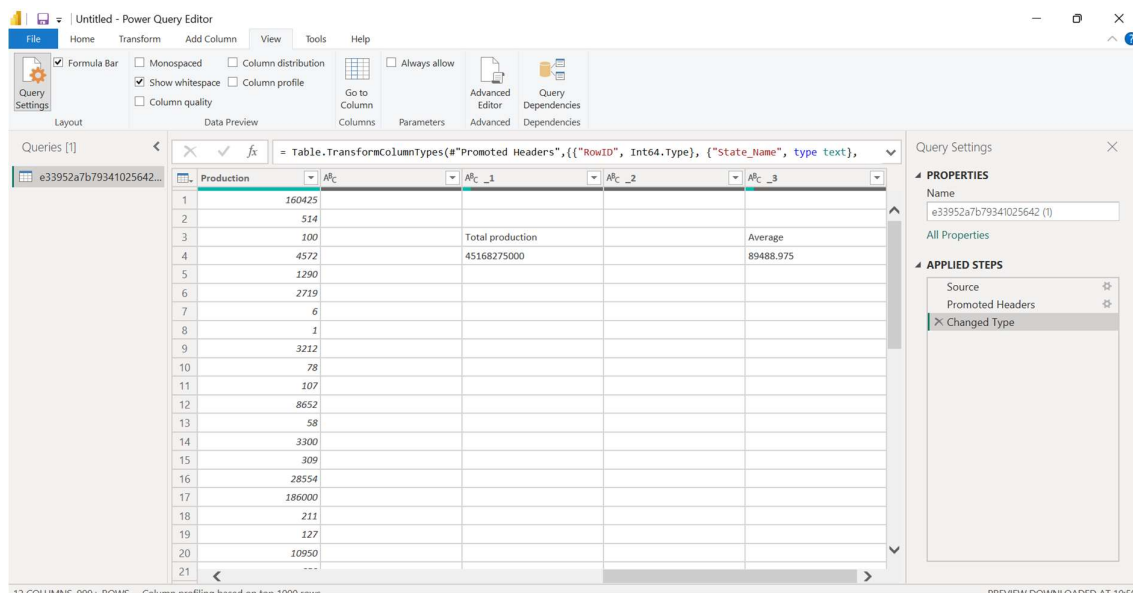
If we can directly load the data and the errors, empty and duplicates is found then we can transform the data to process by clicking on transform data as shown below.



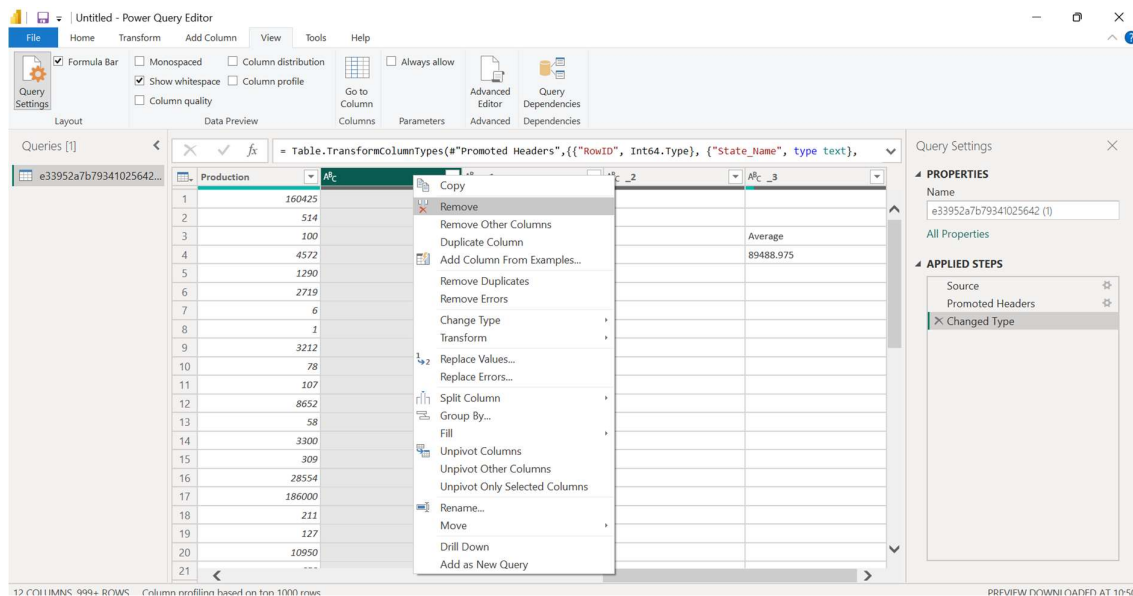
When click on the transform data it enters into new window i.e; Power Query Editor which is used mostly for the processing of the data.



And here we observe that the empty columns are there and with these no use to perform any activities



so we can remove it by right click on the column and click on remove.



If we want to know any errors are takes place then click on column quality it displays on top whether there is any error and empty is takes place as shown below.

Untitled - Power Query Editor

File Home Transform Add Column View Tools Help

Query Settings

Layout Data Preview Columns Parameters Advanced Dependencies

Queries [1]

Table.RemoveColumns(#"Changed Type",{"_1", "_2", "_3"})

	Crop_Year	Season	Crop	Area	Production
	Valid 100%	Valid 100%	Valid 100%	Valid 100%	Valid 100%
	Error 0%	Error 0%	Error 0%	Error 0%	Error 0%
	Empty 0%	Empty 0%	Empty 0%	Empty 0%	Empty 0%
1	2005	Rabi	Wheat	81934	160425
2	2019	Whole Year	Onion	257	514
3	2020	Summer	Maize	100	100
4	2013	Rabi	Groundnut	2872	4572
5	2016	Rabi	Onion	110	1290
6	2014	Rabi	Rapeseed & Mustard	6535	2719
7	2006	Winter	Rapeseed & Mustard	91	6
8	2017	Whole Year	Garlic	1	1
9	2018	Whole Year	Coconut	336	3212
10	2020	Summer	Moong(Green Gram)	125	78
11	2013	Kharif	Other Kharif pulses	223	107
12	2019	Rabi	Rapeseed & Mustard	19337	8652
13	2005	Kharif	Groundnut	72	58
14	2019	Kharif	Moong(Green Gram)	9100	3300
15	2008	Whole Year	Sweet potato	20	309
16	2019	Rabi	Tobacco	5247	28554
17	2006	Rabi	Wheat	45074	186000
18	2017	Whole Year	Turmeric	321	211

8 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows

PREVIEW DOWNLOADED AT 10:50

Query Settings

PROPERTIES

Name

e33952a7b79341025642 (1)

APPLIED STEPS

Source

Promoted Headers

Changed Type

Removed Columns

And if it is clear with 100% valid then go to home tab and click on Close & Apply to close the Query window and connect with the Power BI desktop.

Untitled - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply

Table.RemoveColumns(#"Changed Type",{"_1", "_2", "_3"})

	RowID	State_Name	District_Name	Crop_Year	Season
	Valid 100%	Valid 100%	Valid 100%	Valid 100%	Valid 100%
	Error 0%	Error 0%	Error 0%	Error 0%	Error 0%
	Empty 0%	Empty 0%	Empty 0%	Empty 0%	Empty 0%
1	0	Bihar	NALANDA	2005	Rabi
2	1	Assam	KARBI ANGLONG	2019	Whole Year
3	2	Gujarat	ANAND	2020	Summer
4	3	Karnataka	UTTAR KANNAD	2013	Rabi
5	4	Uttar Pradesh	JAUNPUR	2016	Rabi
6	5	Assam	MARIGADON	2014	Rabi
7	6	Odisha	SONEPUR	2006	Winter
8	7	Rajasthan	DHOLPUR	2017	Whole Year
9	8	Karnataka	BELGAUM	2018	Whole Year
10	9	Bihar	MUNGER	2020	Summer
11	10	Chhattisgarh	JANIGIR-CHAMPA	2013	Kharif
12	11	Assam	KARBI ANGLONG	2019	Rabi
13	12	Uttar Pradesh	SHRAVASTI	2005	Kharif
14	13	Gujarat	PATAN	2019	Kharif
15	14	Tamil Nadu	KARUR	2008	Whole Year
16	15	Uttar Pradesh	KASGANJ	2019	Rabi
17	16	Haryana	MAHENDRAGARH	2006	Rabi
18	17	Assam	DHEMAJI	2017	Whole Year

Query Settings

PROPERTIES

Name

e33952a7b79341025642 (1)

APPLIED STEPS

Source

Promoted Headers

Changed Type

Removed Columns

6.View data

After it opens, the report view in Power BI desktop can be displayed which is used for visualization of data.

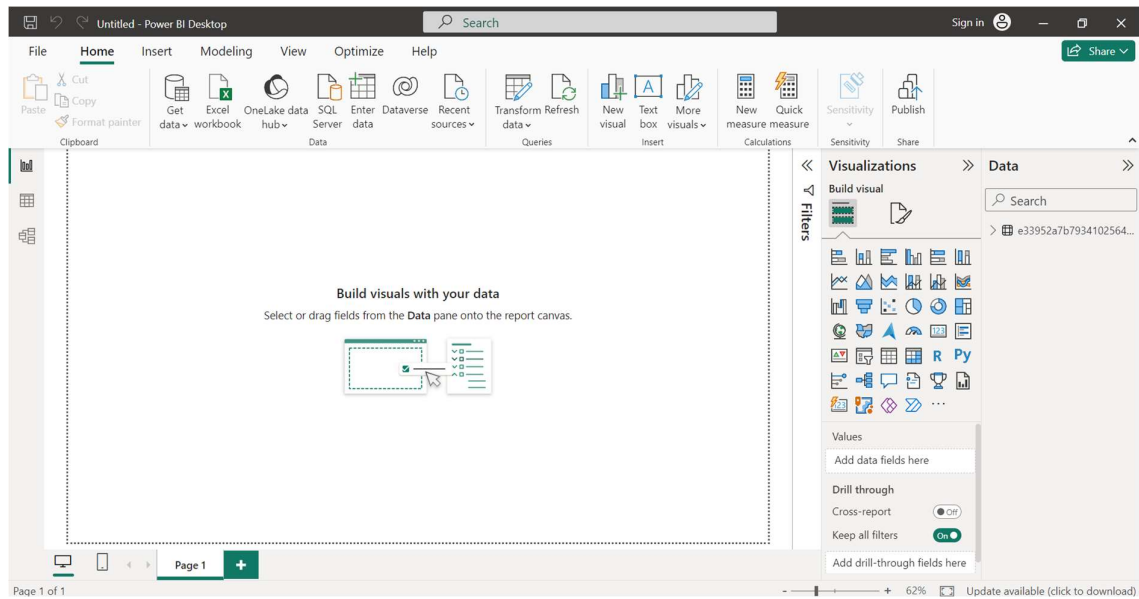


Table view:

Click on Table view to see the data which is transformed.

RowID	State_Name	District_Name	Crop_Year	Season	Crop	Area	Production
48	Uttar 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
9773	Uttar Pradesh	BALRAMPUR	2008	Kharif	Moong(Green Gram)	1	1
9775	Uttar Pradesh	CHANDAULI	2014	Kharif	Small millets	1	1
11191	Uttar Pradesh	GONDA	2015	Kharif	Sannhamp	1	0
11891	Uttar Pradesh	CHANDAULI	2012	Kharif	Small millets	1	0

Table: e33952a7b79341025642 (1) (73,827 rows)

Update available (click to download)