

# DATA ANALYTICS

Bilal Hassam

## Introduction & Descriptives:

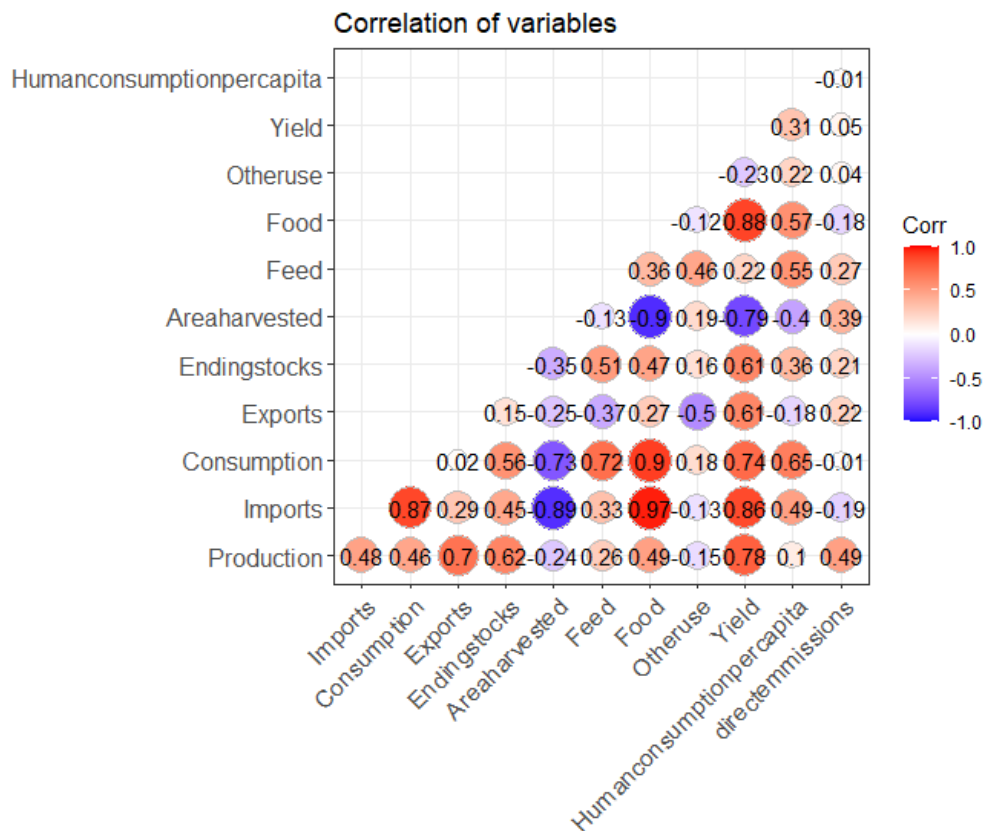
For this task, I decided to work on data available on agriculture. In today's time, it is very important to have as much useful data as possible, which can give you some really important and crucial insights that can affect any business decision. The basis of this research is agricultural data that gives us insight of various variables . There are roughly 13 different variables that I think were relevant for this research including 40+ different observations, which has been given by OECD. OECD is French based organization for economic cooperation where 37 different democratic countries collaborate to develop policy standards to promote sustainable economic growth. For the data published by OCED, I have plotted descriptive table for all the variables given which gives us a brief picture of whole scenario.

**Descriptives table\_figure.1**

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Production	41	274,754.40	17,302.17	230,459.30	264,876.60	287,000.10	298,555.10
Imports	41	33,682.55	7,595.31	17,821.48	28,520.20	41,795.15	43,145.72
Consumption	41	210,599.40	15,070.32	172,047.50	204,219.70	221,459.30	224,982.80
Exports	41	96,974.30	12,885.80	61,949.39	90,138.95	105,837.00	117,395.60
Endingstocks	41	58,482.45	7,277.62	39,554.47	53,953.07	63,269.01	72,091.31
Areaharvested	41	76,825.04	4,905.96	69,994.86	71,635.92	80,548.40	86,961.28
Feed	41	68,231.80	5,861.36	50,579.11	66,378.59	72,206.86	78,574.35
Food	41	118,092.90	9,074.74	99,500.10	113,908.20	126,279.60	130,848.60
Otheruse	41	20,646.39	1,275.83	17,843.18	19,782.50	21,188.56	24,274.19
Yield	41	3.594	0.361	3.014	3.216	3.945	4.151
Humanconsumptionpercapita	41	90.162	1.131	86.999	89.612	90.785	92.81
directemmissions	41	67.026	2.203	63.308	65.481	69.233	70.832

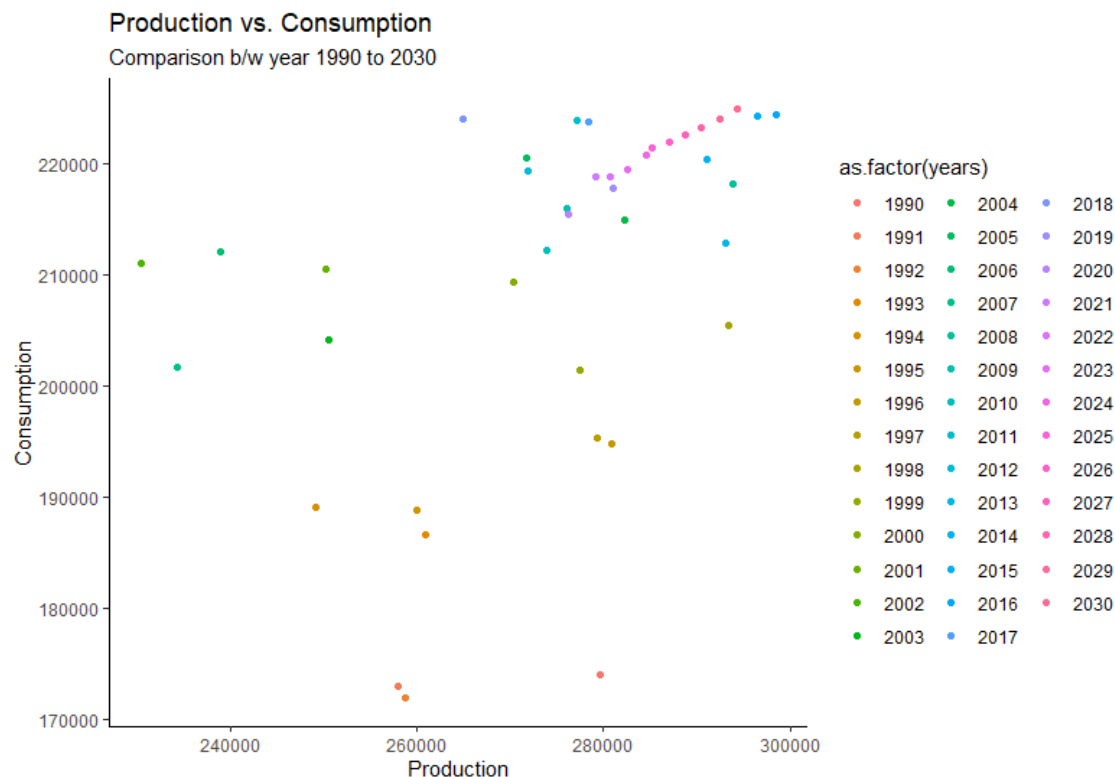
## Correlation of Variables:

The statistical relationship between 2 variables is referred as correlation, there can be different interpretations if the correlation is positive or negative. If the correlation is positive, then it means both variables are moving in the same direction or negative implying that one is increasing and the other one is decreasing and vice versa. And for all the different variables, variable correlation has been plotted in figure 2 which shows that area harvested, and Imports are more in negative direction than other variables.



## Key Insights:

To gain a more in depth understanding of the data set and the improvement of various aspects of agriculture, I focused on the relationship/comparison between different points in times of 2 different variables i.e. Consumption and production. There are other variables that affect consumptions such as imports and exports etc, but the ones I have compared are most comparable to my understanding.



## References:

Mattke, S. (n.d.). *The OECD Quality of Life Indicators Project: history and background*.

[https://academic.oup.com/intqhc/article/18/suppl\\_1/1/1798452](https://academic.oup.com/intqhc/article/18/suppl_1/1/1798452)

Glossary:organisation for economic co-operation and Development (OECD)

[https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Organisation for Economic Co-operation and Development \(OECD\)](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Organisation_for_Economic_Co-operation_and_Development_(OECD))