

AFRICA AND AGRICULTURE:

A DIVE INTO THE PRODUCTION AND CONSUMPTION OF FOOD IN AFRICA FROM 2004 TO 2013



Photo by [Jacopo Maia](#) on [Unsplash](#)

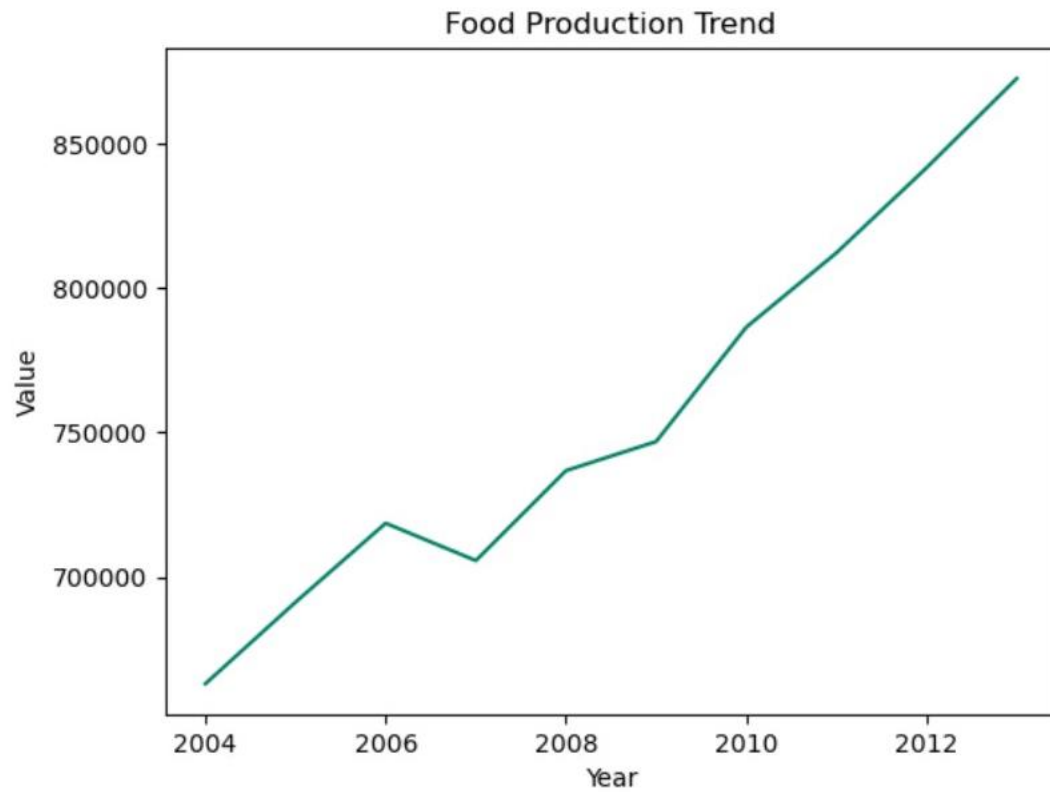
Agriculture, the practice of cultivating plants and rearing animals to provide food and other products, is arguably the most important economic activity in Africa. It plays a major role in the production of food that ensures sustenance of life and environmental preservation, amongst other things.

Important as the agricultural practice is in Africa, it seems to be at a crossroad. Several changes and challenges have taken place over the years, which have affected the food security of the nation.

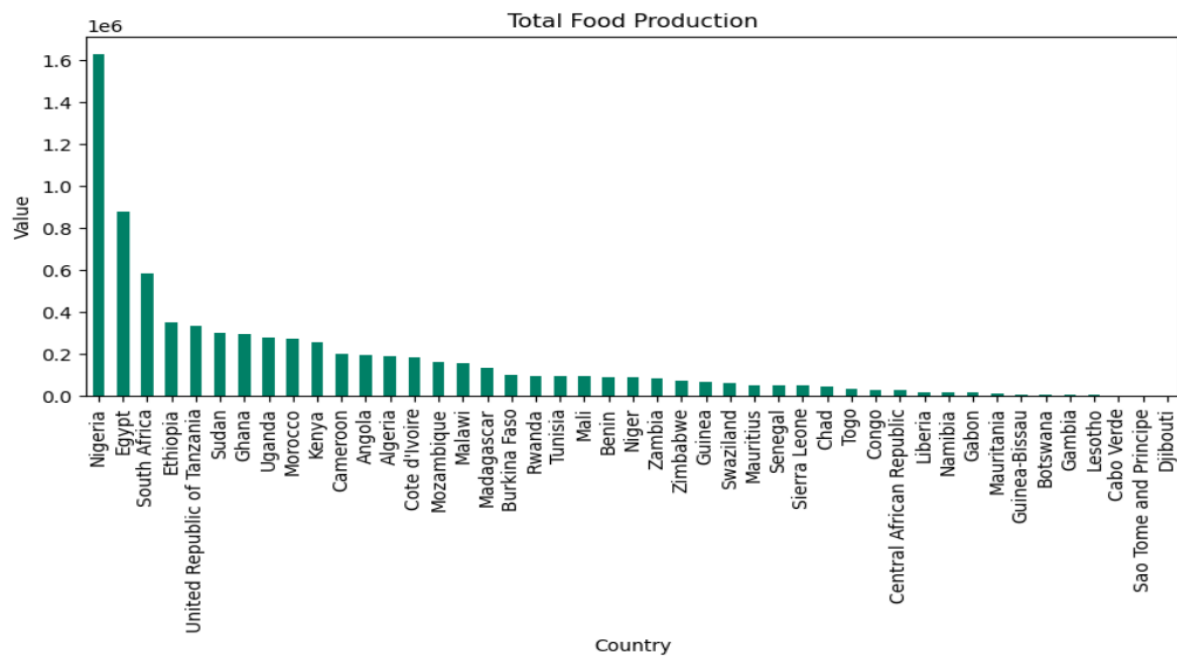
In this project, we take a look at the trend of agricultural productivity in Africa between 2004 and 2013 – major producers, major consumers, trends in production and supply.

TREND OF FOOD PRODUCTION:

Between 2004 and 2013, there was an increase in the production of food in Africa, with an exception in the year 2007, where there was a decline.



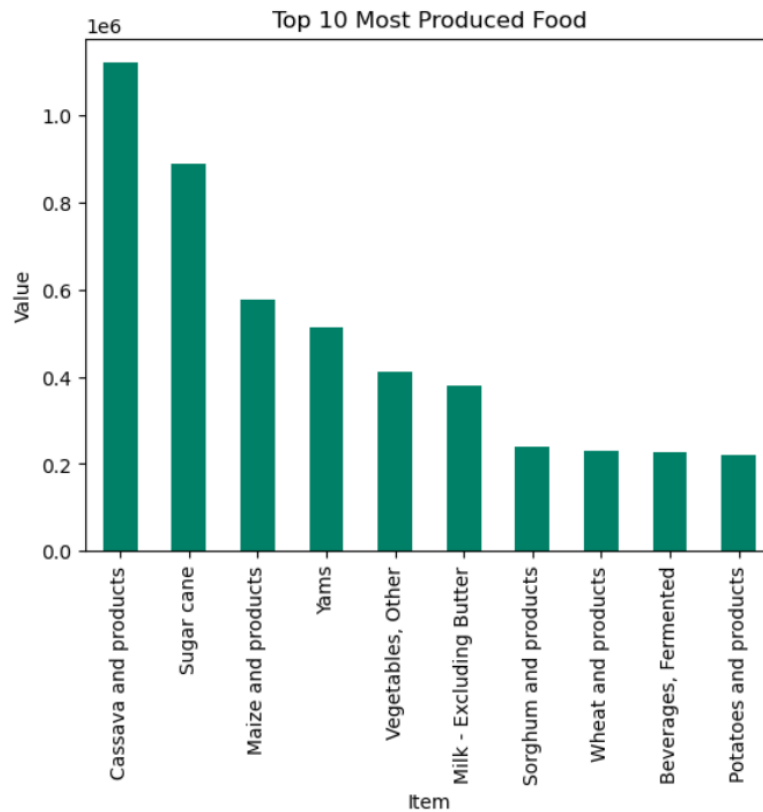
Let's look at how each country represented in the data contributed to the growth of food production over the 10-year period.



Nigeria, Egypt and South Africa were the major contributors to the total food production in Africa, while Cabo Verde, Sao Tome and Principe and Djibouti contributed the least.

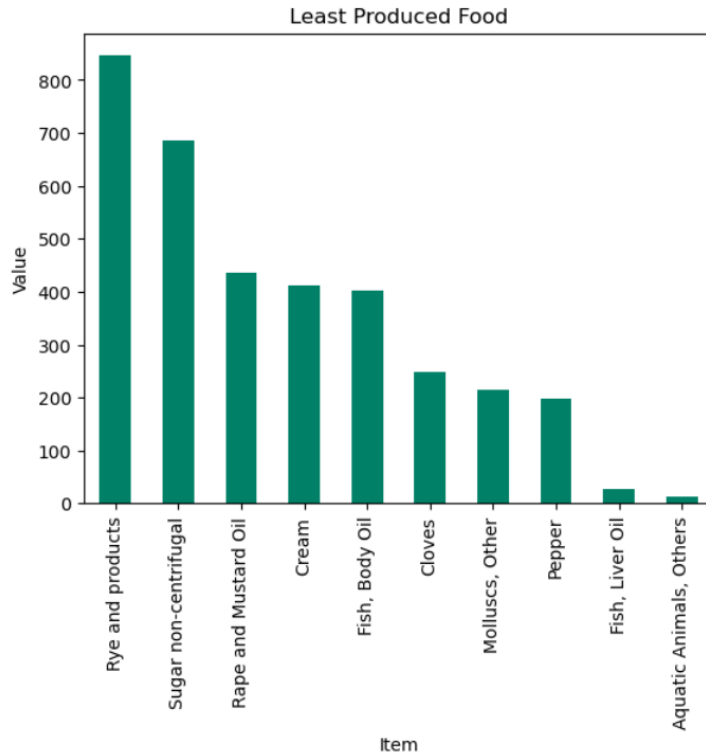
MOST PRODUCED FOOD ITEMS:

Of the Agricultural items produced between 2004 and 2013, the top 5 items produced were: Cassava and products, Sugar cane, Maize and products, Yams, Vegetables & Others.



LEAST PRODUCED FOOD ITEMS:

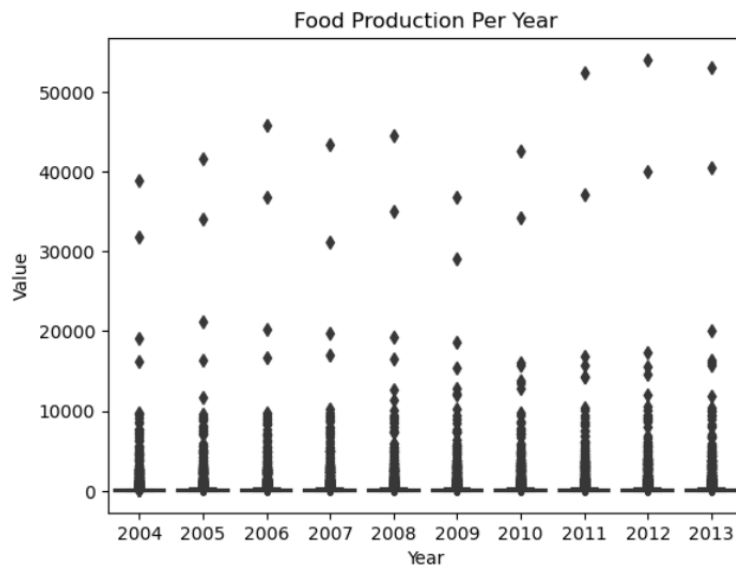
Of the Agricultural items produced between 2004 and 2013, the least produced were: Cloves, Molluscs/Other, Pepper, Fish, Liver Oil and Aquatic Animals, Others.



DISTRIBUTION OF FOOD PRODUCTION OVER THE YEARS:

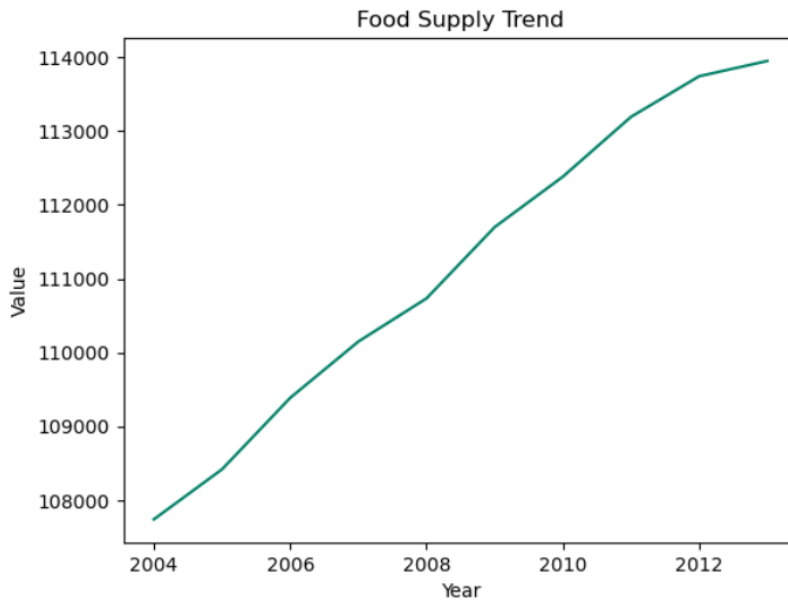
In analyzing the distribution of food production across the Countries, the statistical values were taken into account. The 25th Percentile and the 75th Percentile were used to calculate the interquartile range of the food production data, which showed the data had outliers.

This was then visualized with a box plot.

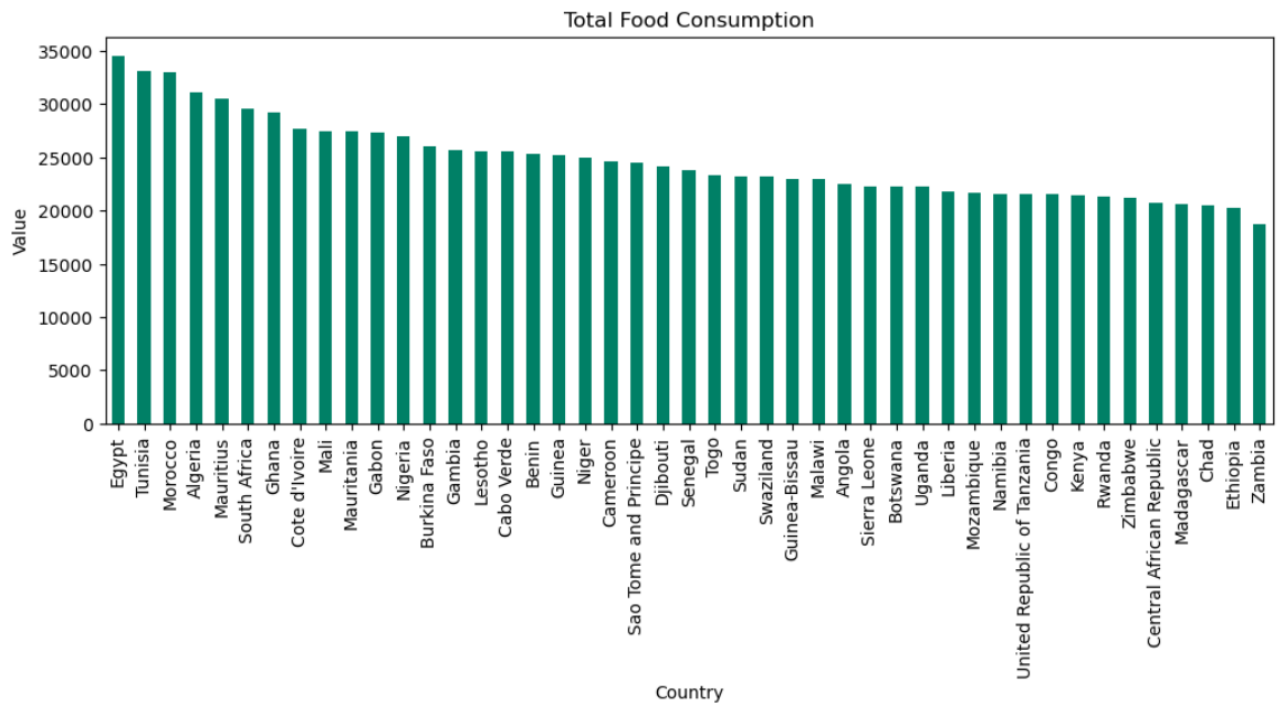


TREND OF FOOD SUPPLY:

Between 2004 and 2013, there was a steady increase in the supply of food in Africa.



Let's look at the trend of food supply per Country over the 10-year period.

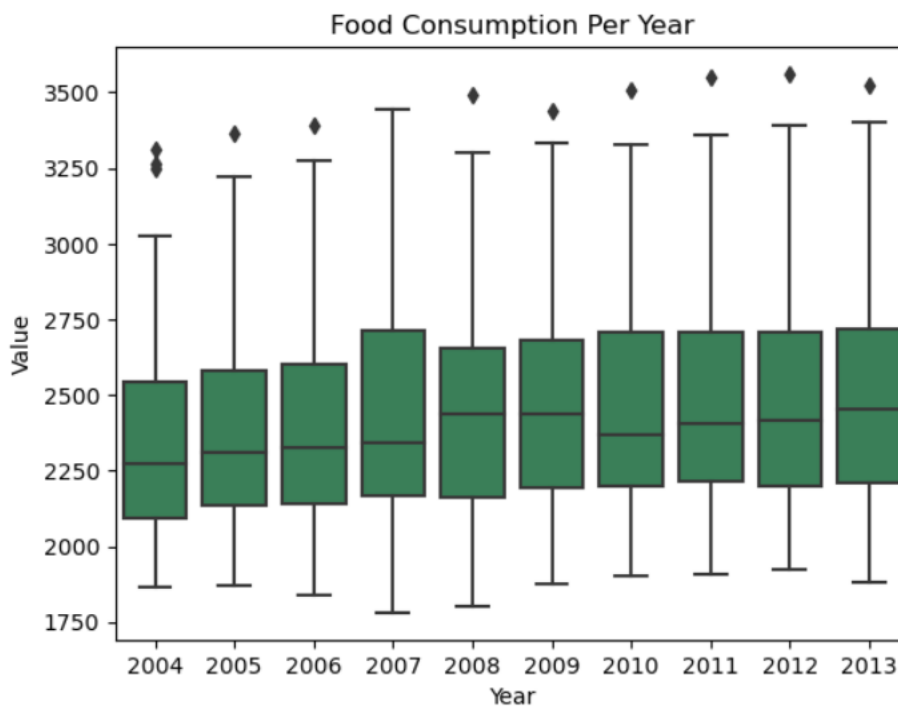


Egypt, Tunisia and Morocco had the highest rate of food consumption, while Chad, Ethiopia and Zambia had the least.

DISTRIBUTION OF FOOD SUPPLY OVER THE YEARS:

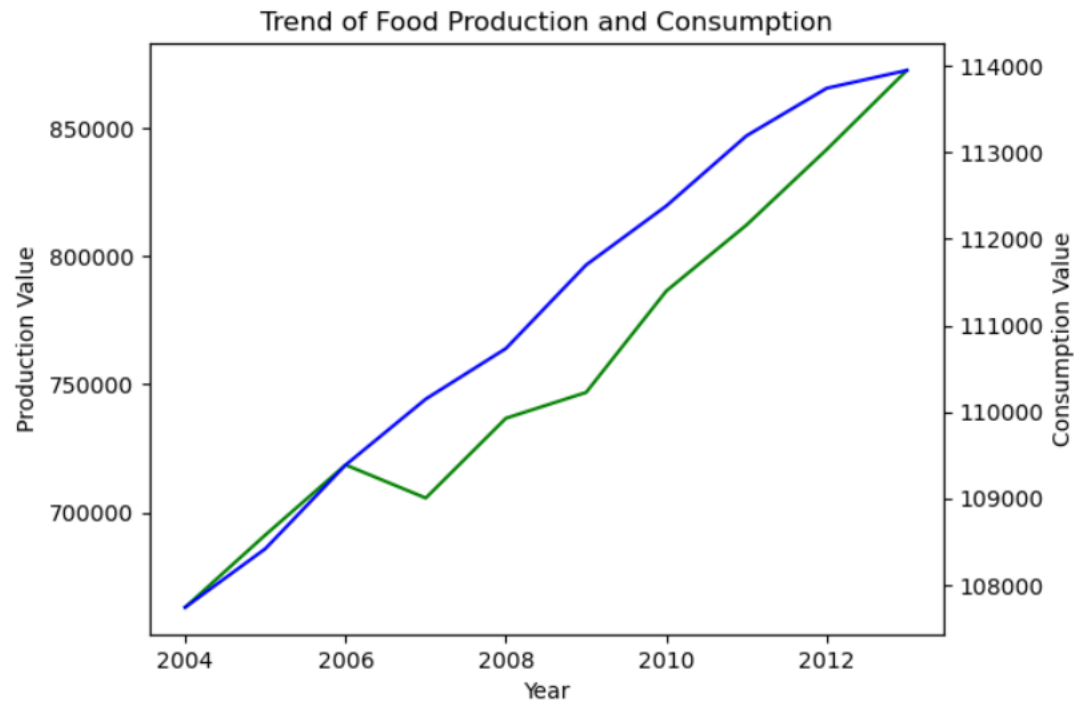
In analyzing the distribution of food consumption across the Countries, the statistical values were taken into account. The 25th Percentile and the 75th Percentile were used to calculate the interquartile range of the food production data, which showed the data had very few outliers.

This was then visualized with a box plot.



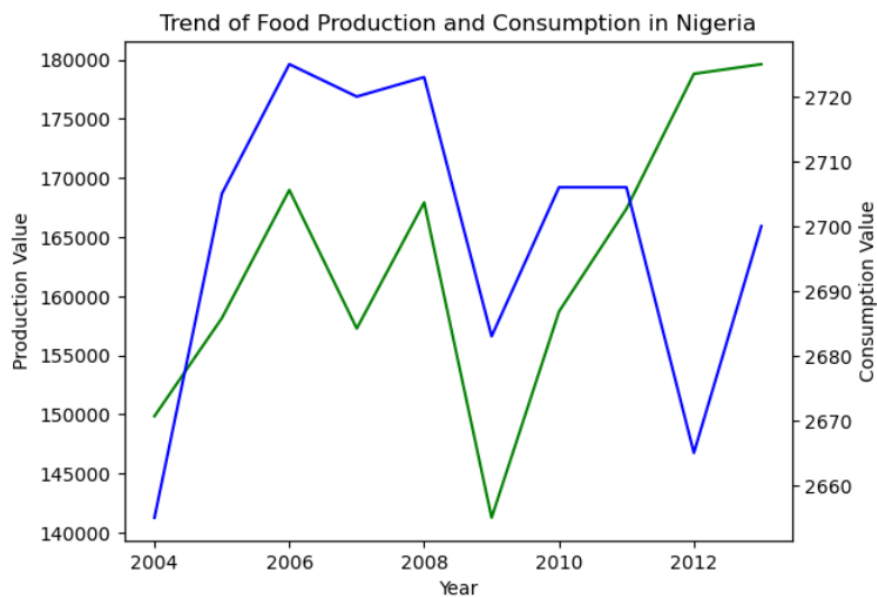
CORRELATION BETWEEN FOOD PRODUCTION AND FOOD SUPPLY:

Despite the decline in food production (green trend line) in the year 2007, there was no visible effect on the food supply (blue trend line) in the same year. Food supply had a steady increase between 2004 and 2013, while food production had a decline only in the year 2007.



We will look at the correlation of these variables in the highest producing countries – Nigeria and Egypt, and the highest consuming countries – Egypt and Tunisia.

NIGERIA:



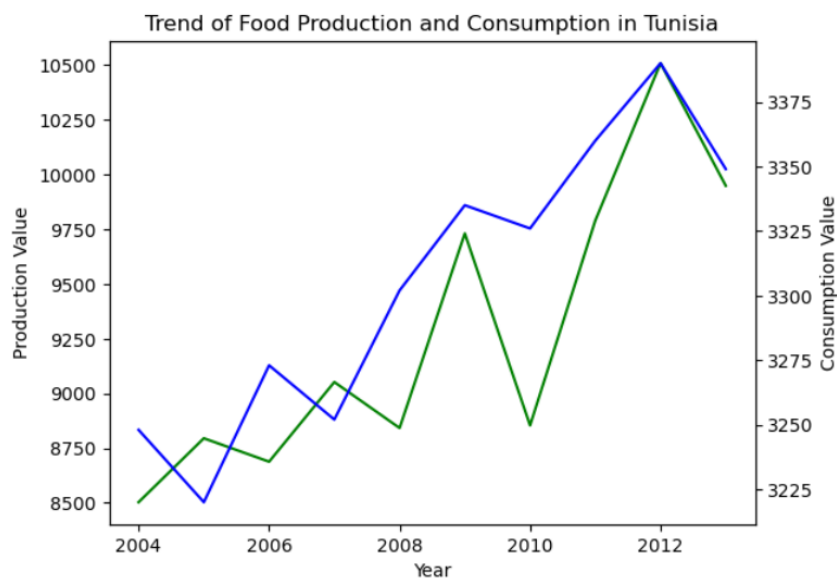
From the plot, we can see that there was a positive correlation between food production and consumption in Nigeria, from 2004 to 2010.

EGYPT:



There was a negative correlation between food production and food consumption in Egypt, from 2009 to 2013.

TUNISIA:



There was a negative correlation between food production and food consumption in Tunisia, from 2004 to 2008, after which there was a positive correlation between both values.

CONCLUSION:

While Africa is increasing her agricultural productivity, it is obvious that there are factors actively contributing to wastage of produced food, leading to a slow growth in supply

These Factors may include: Reduced Purchasing Power of Individuals, Poor Storage Facilities, Inadequate Industrial Facilities for processing, amongst other things.

Once these factors are considered thoroughly, and worked on, Africa will see a rise in production and supply of food, and an even greater rise in food security.