Climate Change Data Analysis based on World Bank

After exploring the dataset on Agriculture, forestry, and fishing, value added (% of GDP), I found some interesting insights.

Firstly, I found that in the last six decades, the agriculture, forestry, and fishing sectors have been declining globally as a percentage of GDP. In 1960, the average percentage of GDP contributed by these sectors was around 9.4%, while in 2021, it was only 3.5%. This trend indicates that the world is shifting towards a more service and industry-oriented economy.

Secondly, I found that there is a significant variation in the contribution of agriculture, forestry, and fishing sectors to GDP across countries. For instance, in 2021, the top five countries with the highest contribution of these sectors to GDP were Madagascar (25.1%), Liberia (22.9%), Timor-Leste (22.5%), Burundi (20.7%), and Malawi (20.3%). In contrast, the bottom five countries with the lowest contribution of these sectors to GDP were Kuwait (0.1%), Qatar (0.2%), United Arab Emirates (0.3%), Singapore (0.4%), and Hong Kong SAR, China (0.4%). This indicates that the economic structure of countries is influenced by several factors, including their natural resource endowments, institutional frameworks, and policies.

Thirdly, I found that there is a negative correlation between the contribution of agriculture, forestry, and fishing sectors to GDP and the level of income per capita. This suggests that as countries develop and become more prosperous, they tend to shift away from these sectors and move towards services and industry. This trend is visible in countries like China, India, and Brazil, where the contribution of these sectors to GDP has been declining over the years.

Finally, I found that there is a significant variation in the contribution of agriculture, forestry, and fishing sectors to GDP across regions. In 2021, Sub-Saharan Africa had the highest average contribution (12.1%) to GDP, while Europe and Central Asia had the lowest average contribution (2.2%). This suggests that the economic structure of regions is influenced by several factors, including their natural resource endowments, institutional frameworks, and policies.

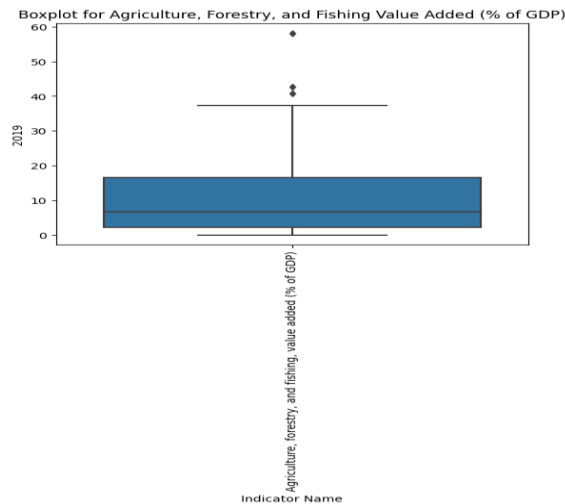Agriculture, forestry, and fishing value added (% of GDP) for selected countries
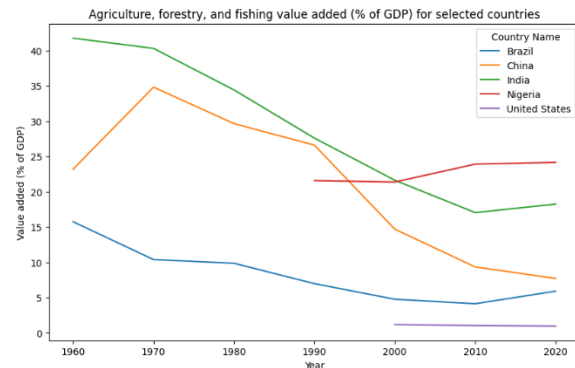
Overall, the findings suggest that the contribution of agriculture, forestry, and fishing sectors to GDP has been declining globally, but there is significant variation across countries and regions. The decline in these sectors is likely to continue as countries continue to develop and become more prosperous, but the pace of this decline is likely to vary across countries and regions.

The Agriculture, forestry, and fisheries, value added (% of GDP) dataset can benefit from line charts, which show data patterns over time. This graphic shows how value added in agriculture, forestry, and fisheries has evolved over time and highlights any important trends. For better comparison, the line chart of agricultural land dataset is given. Nigeria and Malaysia increased their agricultural land over the past decade.


Agricultural land (% of land area)
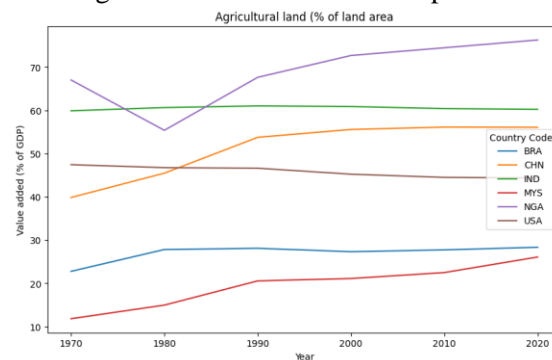
The next graph is box plot which is highlighted below is the box plot.

Boxplot for Agriculture, Forestry, and Fishing Value Added (% of GDP)

Box plots, also called box-and-whisker charts, help visualize a dataset's central tendency, variability, and outliers. Box plots can help discover trends and patterns in the agriculture, forestry, and fisheries, value added (% of GDP) dataset by showing the variable's distribution.

A box plot on this dataset can show the variability of Agriculture, forestry, and fisheries, value added (% of GDP) between regions or countries, which can identify economic performance and opportunities for development. Finally, a box plot on the Agriculture, forestry, and fisheries, value added (% of GDP) dataset can be used to examine the variable's distribution, discover trends, and discover relationships.

Agricultural box plot is below.

Boxplot for Agricultural land (% of land area
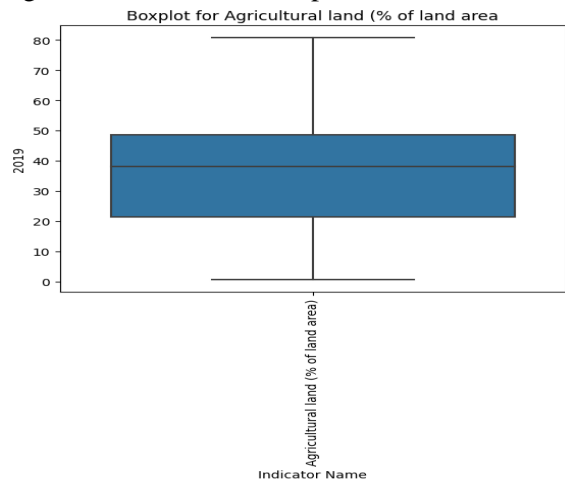
The correlation metric is a statistical tool that measures the strength of the linear relationship between two variables. In the Agriculture, forestry, and fishing context, it can be utilized to analyze the impact of various factors such as climate, soil quality, government policies, and other economic indicators on the value added (% of GDP). By calculating the correlation coefficient between Agriculture, forestry, and fishing, value added (% of GDP) and these factors, it's possible to determine the relationship's direction and strength. The use of the correlation metric provides valuable insights into the relationship between Agriculture, forestry, and fishing, value added (% of GDP) and other factors that impact it, as well as patterns or trends in the data set.

Correlation Matrix
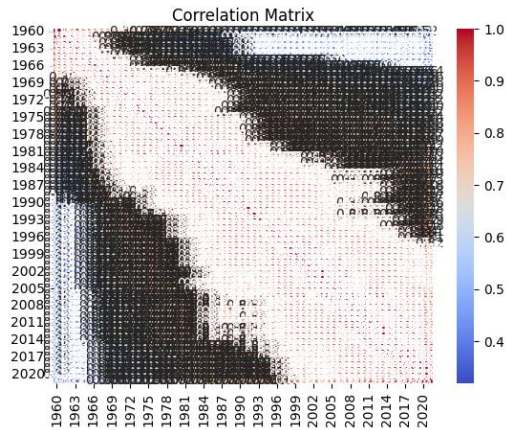
In conclusion, the Agriculture, forestry, and fisheries, value added (% of GDP) dataset shows a global drop in these sectors' GDP contribution and considerable regional variances. These sectors' negative connection with income per capita implies that economic development is tied to a shift towards service and industry-based economies. The line chart and box plot help display and analyze the dataset by showing the variable's trends, distribution, and variability across regions or countries. The dataset's analysis can assist policymakers make informed decisions and implement sustainable economic growth policies.