**Statistics and Trends of Countries from World Bank Data**

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**DataSourceLink :** [**https://databank.worldbank.org/reports.aspx?source=2&series=AG.LND.FRST.ZS&country=#**](https://databank.worldbank.org/reports.aspx?source=2&series=AG.LND.FRST.ZS&country=)

**GitHub Repository link:**

[**https://github.com/sanghavi432/Assignment2-applied-datascience-1-.git**](https://github.com/sanghavi432/Assignment2-applied-datascience-1-.git)

**Abstract**

Discovering the global bank’s data statistics and patterns through various analyses and displaying the indicators that influence the data. I've examined how access to and production of energy vary among countries in this article. how crop production and fertiliser production are connected. examined if the area covered by forests raises the rent on natural resources. analysed the GDP per capita of several nations throughout time, as well as the relationship between GDP and agricultural yield. Using the Python packages Pandas, NumPy, SciPy, Seaborn, and matplotlib, the task was completed.

**Statistics and trends of countries from World Bank data**

By using different kinds of analysis, we found the statistics and trends of World Bank data that affect world development.

**Finding 1: Finding 2:**

Graph of energy production from oil and coal sources

Description automatically generated

**Line Graph**

The above graph shows the electricity production from oil, gas, and coal sources in India, the United Kingdom, Thailand, Pakistan, Norway, and the Netherlands from the year 2008 to 2015. We can see that in the United kingdom, electricity production decreased from 2008 to 2015.

**Finding 3:**

A graph of a number of electricity

Description automatically generated with medium confidence

**Bar Plot**

The above bar plot shows the percentages of access to electricity in urban and access to electricity in rural areas from year 2008 to 2020 around the world. We can see the percentages of access to electricity in urban areas and access to electricity in rural A red and blue squares

Description automatically generated**Heat Map**

The above map shows the correlation between Fertilizer consumption percentage and crop production. It shows that when Fertilizer consumption increases, crop production also increases. So, it shows it has a positive correlation as both the indicators are directly proportional to each other.

areas had been increasing over the years, from over 60 to above 80 from the years 2008 to 2020.

**Finding 4:**

A graph of a number of years

Description automatically generated with medium confidence

**Bar Plot**

The above bar plot shows the percentages between total natural recourse rents and forest area from the year 2008 to 2020. We can see that forest area is always greater than total natural resource rent from 2008 to 2020 also it is almost the same percentage from 2008 to 2020 which is nearing 25. The natural resources rent has decreased over the years 2008 to 2020.

**Finding 5:**

**A graph of the growth of countries/regions

Description automatically generated with medium confidence**

**Line graph**

The above line graph shows the GDP per capita percentages of India, the United Kingdom, the Netherlands, Thailand, Pakistan, and Norway from the year 2008 to 2020. We can see that India has a seen very slight increase from 2008 to 2020. The United Kingdom has increased its percentage from 2008 to 2019, and it has been decreased in 2020. Thailand has increased from 2008 to 2020. Pakistan has seen a very slight increase over these years. For Norway, the GDP per capita has been increasing and decreasing over the years, and the percentage in 2020 is higher than the percentage in 2008. For the Netherlands, the percentage has increased from 2008 to 2020 and stabilised from 2019 to 2020.

**Finding 6:**

**A red and blue squares

Description automatically generated**

**Heat Map**

The above heat map shows the correlation between crop production and GDP per capita. It shows that there is a negative correlation between crop production and GDP per capita, and they are inversely proportional to each other. It indicates that gdp growth doesn’t only depend on crop production.

**Conclusion:**

Here we can conclude that indicators such as forest area, GDP per capita, total natural resource rents, crop production, and Fertiliser consumption have higher impacts on World Bank data and lead to the development of world countries over the years, which has many advantages for the world population.