STATISTICS AND TRENDS

NAME: ANEENA BABU

STUDENT ID: 22015151

ABSTRACT

In this report which shows the environmental data analysis of nine countries over a specific period based on several indicators. For visualization, line graphs, bar graphs and heat map is used. Using these data visualization tools, we will come by an intuition in to the data that we chose and also get a glimpse of the changes that had over the period. Heat map which is used helps to find the correlation between the indicators that provided here.

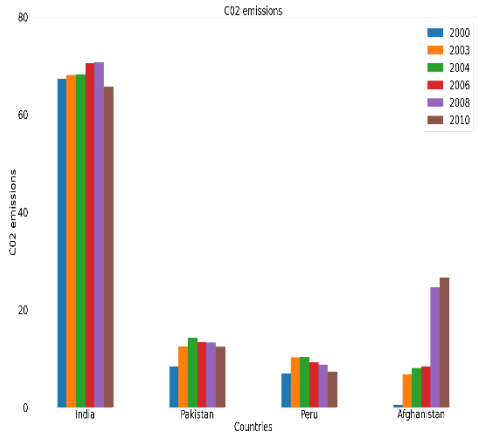
GIT HUB LINK: https://github.com/Aneenababu123/Statistics-and-trends

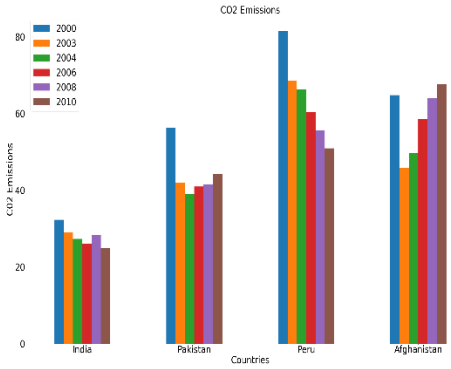
SOURCE LINK: https://data.worldbank.org/topic/environment

DATA ANALYSYS FOR ENVIRONMENTAL CHANGES

For the data analysis of Environment nine where chosen and the interactions between the following indicators were examined: co2 emissions from solid, liquid, gaseous and renewable energy consumption and electricity output then methane emission (% change from 1990).The examination into source disclose the correlation between the indicators after the examination.

VISUALIZATION



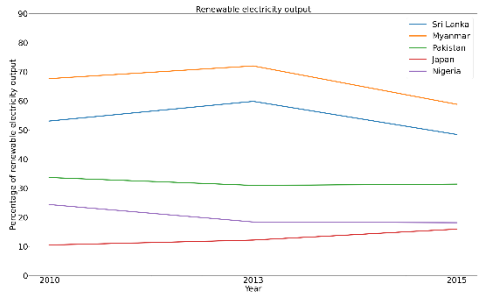


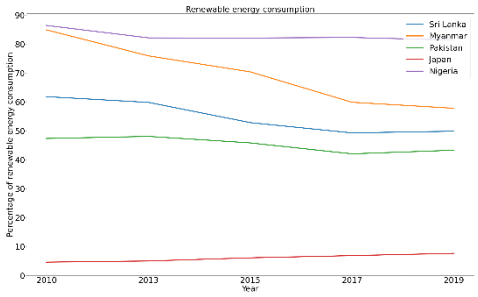
The given graphs depicts the carbon dioxide emissions from solid and liquid fuel consumption of four countries during the period of six selected years. As we can see, India and Pakistan have the excessive emission from solid fuel compared to Peru and Afghanistan.

When looking into liquid fuel consumption among four countries Pakistan has the inflated emission rate, followed by India and Peru. Apart from this Afghanistan has the lowest emissions from both the solid and liquid fuel consumption among the four countries.

summary_statistics

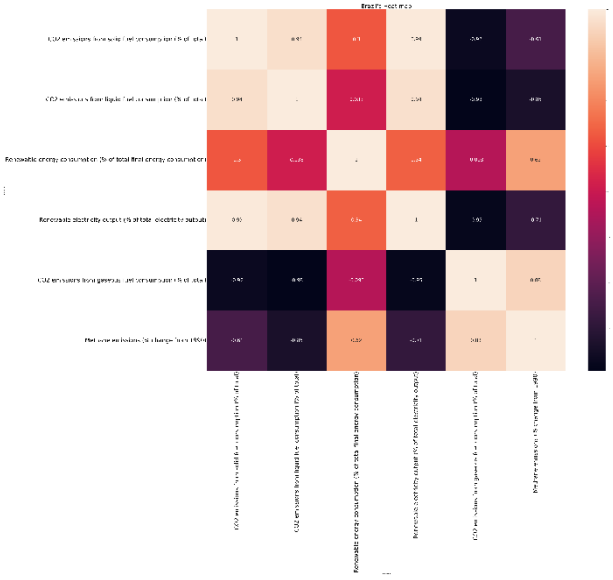
	Total fisheries production (metric tons)	CO2 emissions from gaseous fuel consumption (kt)	CO2 emissions from liquid fuel consumption (kt)	Capture fisheries production (metric tons)
count	56.0	56.0	56.0	56.0
mean	5788.935178571430	14949.311285714300	24224.005563571400	5678.125
std	1957.7543093911800	10480.958205984100	19802.858727440600	1973.654107738550
min	2034.0	1437.464	-726.066	2034.0
25%	4335.3025	6331.992250000000	6199.98025	4028.5
50%	5406.58	13986.4365	16338.3185	5124.0
75%	7638.0	20820.308250000000	38861.94925	7456.0
max	10796.0	41627.784	64124.829	10788.0





The following line graph depicts the comparison between energy consumption and renewable electricity output between five countries which are Sri Lanka, Myanmar, Pakistan, Japan and Nigeria using the data for the years 2010 and 2019. As per the graph and the data, Myanmar has consistently had the excessive percentage of renewable.

Consumption from 2010 and 2019 among five different countries. Here Sri Lanka which showing the steady increase in renewable energy consumption over the years, then with a notable bounce from 2013 to 2015.Japan has also shown a remarkable increase in renewable energy consumption, Evidently from the graph, Myanmar and Japan has a notably had the highest percentage of renewable electricity output among the five countries.



The above Brazil heat map evidently shows that the emissions from solid fuel consumption with renewable electricity output is positively correlated. Also the CO2 emissions from solid consumption and gaseous fuel are negatively correlated.