Applied Data Science 1

(Statistics and Trends)

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Short Abstract: - In the below given record illustrates the relation of how much coal and hydroelectricity sources were used in the production of electricity. Wherein, the other two graph depicts the emissions of nitrous oxide and methane gas from the agricultural land.

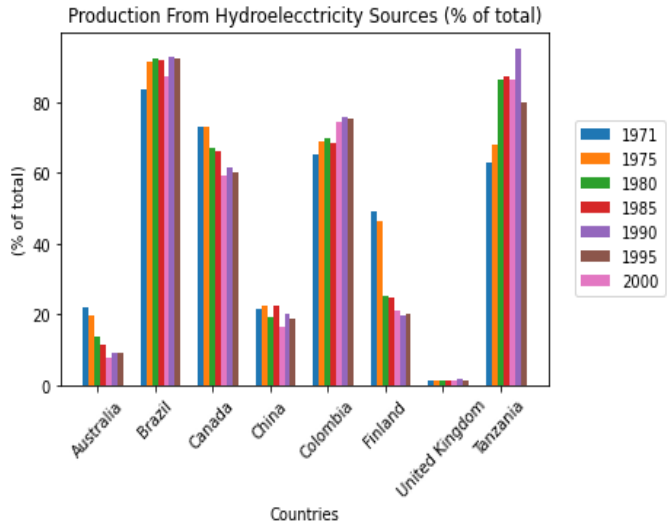
My repo file link:-

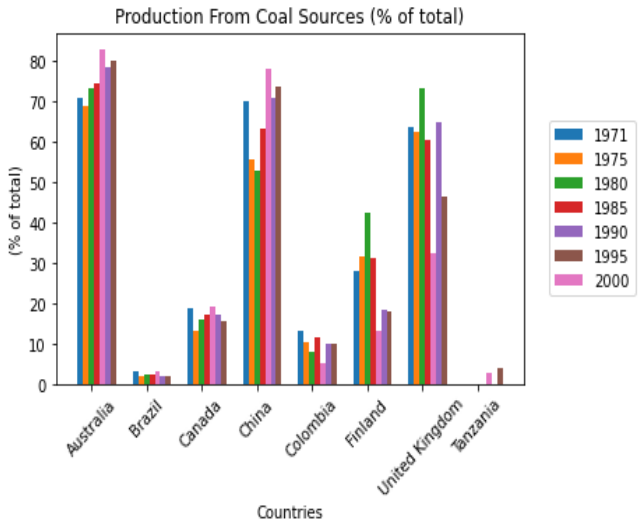
https://github.com/Mansipatel2919/Statistics-and-Trends.git

Climate change data analysis based on World Bank data

To analyse the interrelations of the factors affecting the climate change in seven countries from the different continents. From the Production from Coal Sources (% of total), production From Hydroelectricity Sources (% of total), Agricultural methane emissions (thousand metric tons of CO2 equivalent) and Agricultural nitrous oxide (thousand metric tons of CO2 equivalent).

The analysis found some relations between the factors and causes behind this climate change:-





The bar graph above compares the production of electricity by from Hydroelectricity sources in eight different countries from years 1971 to 2000 in five years increments .At the beginning of the period, in 1971, the production from hydroelectric sources in Australia were above 20%.

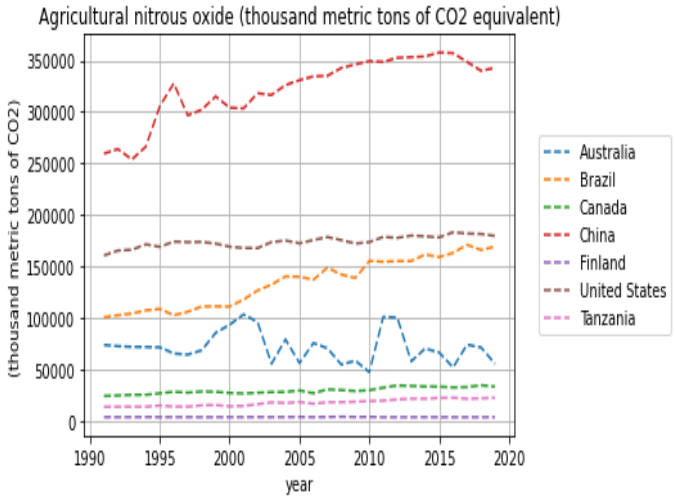
Whereas in Brazil they use 80% of the total source. Apart from that, Canada, China, Colombia, Finland used the average hydroelectric sources to produce electricity throughout the given period. Tanzania used the highest amount of hydro sources in 1990 and United Kingdom were at below 20% in the usage of resource for the production..The hydroelectric was more used in the production compared to coal resources. Also

The “production from hydroelectricity” and “production from coal resources have sideways trends which is significant phenomenon.

To sum up, it can be seen that, in the production of electricity, hydroelectric sources are more used compared to coal resources from the above mentioned countries.

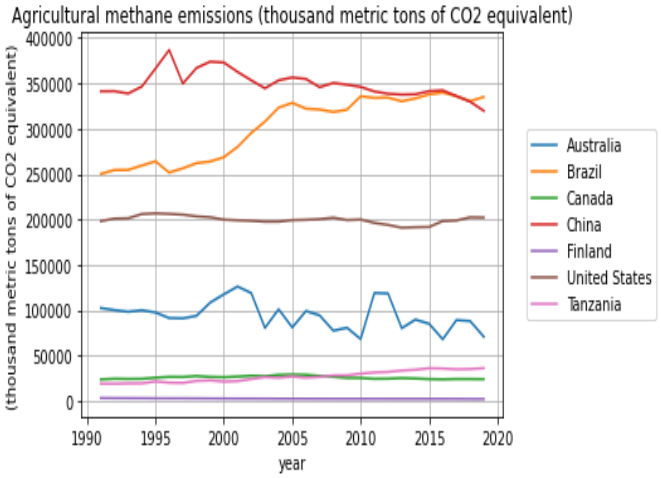
The table below depicts the electric power consumption in the following given countries as per the (kWh per capita) from to 2005 .It can be clearly seen that use of electric power increased in the given period. However , China was the only country

Countries	**1995**	**2000**	**2005**
Australia	8994kwh	10193kwh	10458kwh
Brazil	1634kwh	1897kwh	2015kwh
Canada	16532kwh	17037kwh	16948 kwh
China	770kwh	1782kwh	992kwh
Colombia	920kwh	845kwh	909kwh
Finland	13591 kwh	15305 kwh	16117 kwh
United States	12659 kwh	13671 kwh	13704 kwh



The line graph illustrates the trends of the emissions of the nitrous oxide in thousand metric tons of co2 in Australia, Brazil, Canada, China, Finland, United States and Tanzania. From 1990 to 2020 with the increment of five years.

To begin with, 250000 metric nitrous oxide emits from the agricultural land in China which showed an upward trend and reach above 300000 in 2020.To add to this United States and Brazil showed similar trend and Australia depicts minor fluctuations in the emissions which is same the emission of methane from the agriculture. Lastly, Canada, Finland and Tanzania emits the minimum hydroelectric and methane gas.



Overall, it can be seen that from the above mentioned countries from the world China was the highest in emissions of both gases which affect the climate change.