

CLIMATIC CHANGES ANALYSIS FROM WORLD BANK DATA API

Climatic Changes: Climatic Changes are long term shift in weather patterns of region or entire planet. These changes can be alteration in temperature, precipitation, wind patterns and other factors that affect the Earth's climate.

Climate Changes Data is taken from World Data API which contains different types of indicators

Indicators in Climate changes that I have chosen are given below:

- CO2 emission (kt): Carbon dioxide emission are those stemming from burning of fossil fuels.
- Nitrous GAS Emission (%): is formed through the oxidation of nitrogen oxide (NO) in the air.
- POPULATION GROWTH (%): increase in the number of individuals living in a given area over a period of time.
- URBAN POPULATION: number of people who live in urban areas, which are densely populated regions characterized by a high degree of economic, social, and cultural activity
- FOREST AREA (%): The land covered with forests

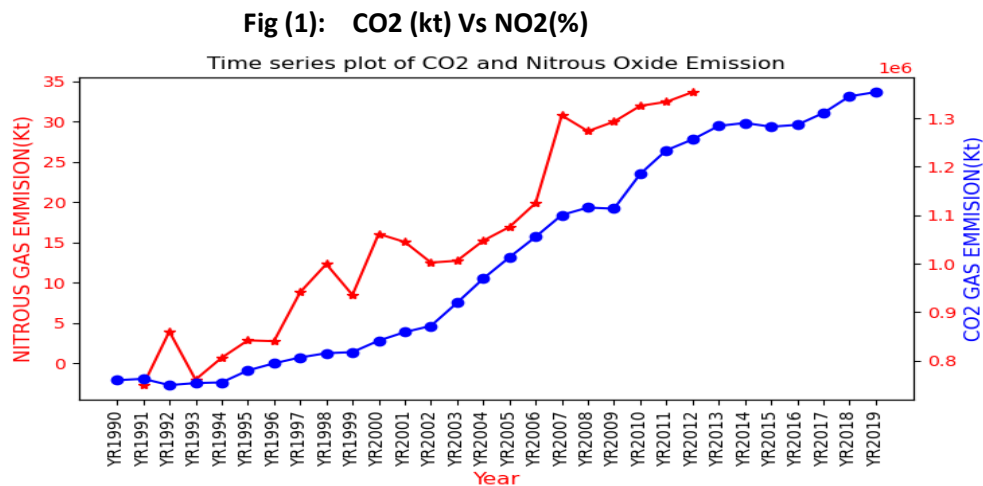


Fig1 shows the statistics of time series plot between Carbon dioxide emission(kt) and Nitrous oxide emission(kt)

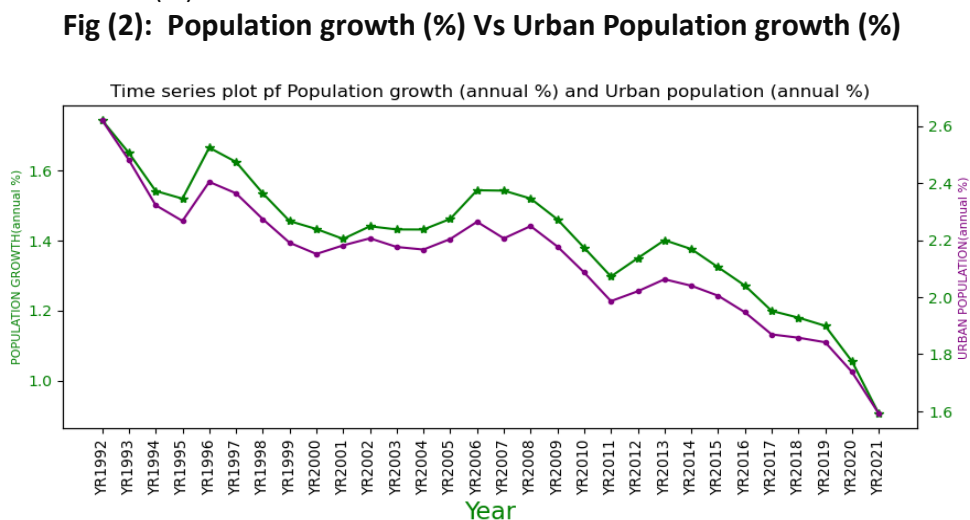


Fig2 shows the time series plot between the population growth and urban population growth annually (%) from 1992-2021 which indicates population growth is increased by 44% and urban population increased by 45% of total worlds population this represents increase in urbanization.

Fig (3) Nitrous oxide of countries Vs Nitrous oxide of World

Here is the NO2 emission in three different countries-UK, China, Canada that are compared to the World's NO2 emission, here the statistics shows the highest level of emission produced in the country of China then rest and the lowest is from United Kingdom.

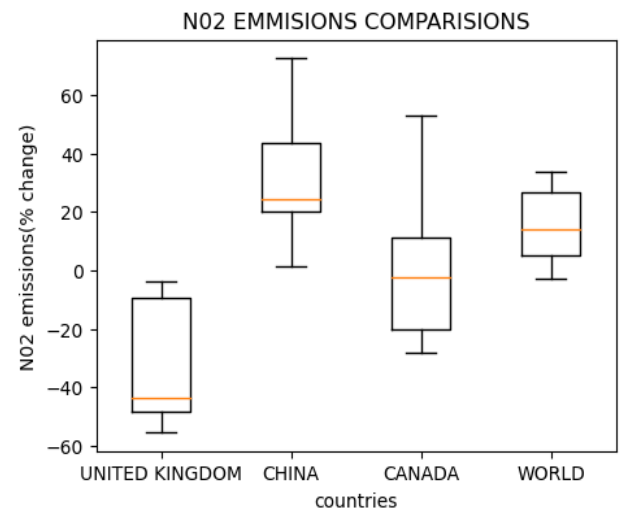


Fig (4): CO2 Emission(kt) for different Countries

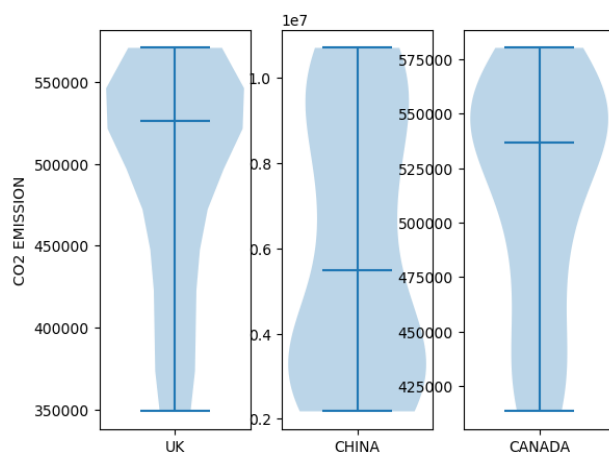


Fig4

shows the Carbon dioxide emission in three different countries i.e. (United Kingdom, CHINA, CANADA) and Canada records the highest emission and China records the lowest levels of emission

FIG (5): PAIRWISE CORRELATION OF FOREST AREA (%) OF THE WORLD:



here Fig5 is the statistical analysis of the forest area (%) of the world, this calculates every column in data and interprets results

Reference: <https://data.worldbank.org/topic/climate-change>