

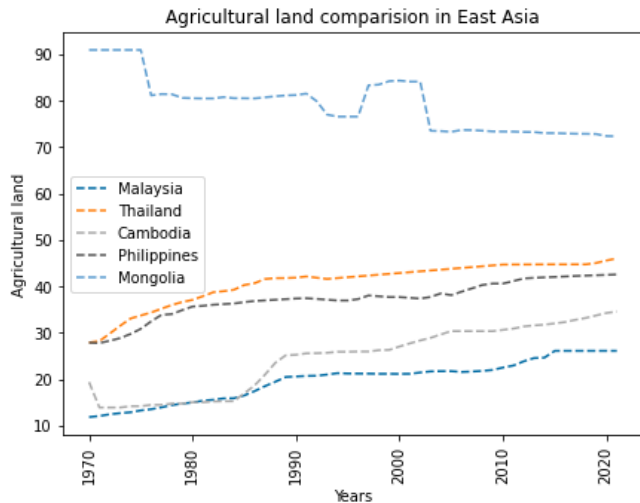
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**Github Repository link: [https://github.com/Shahroze-Gondal/Climate\\_Change.git](https://github.com/Shahroze-Gondal/Climate_Change.git)**

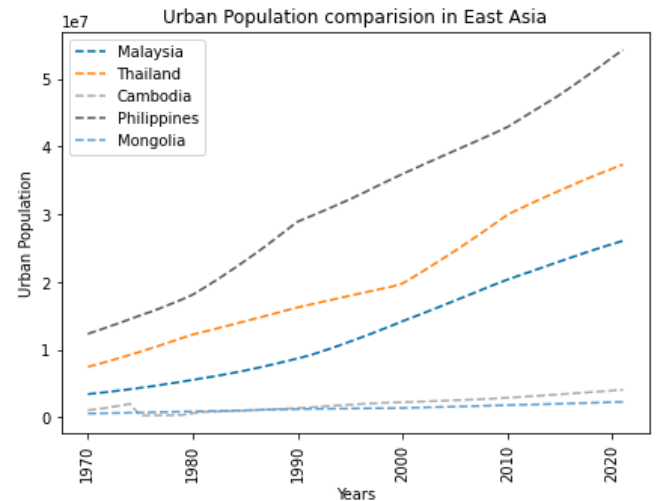
## Climate change data analysis based on World Bank data for East Asia.

For this analysis seven countries from East Asia were selected and the interrelations of the following factors on climate change were investigated: CO2 emissions, Percentage in GDP from agriculture forestry and fishing, Agricultural land, Population growth, Agricultural land, Electric power consumption and School enrollment (primary and secondary).

The examination discovered a few connections between the variables and causes behind them were researched.



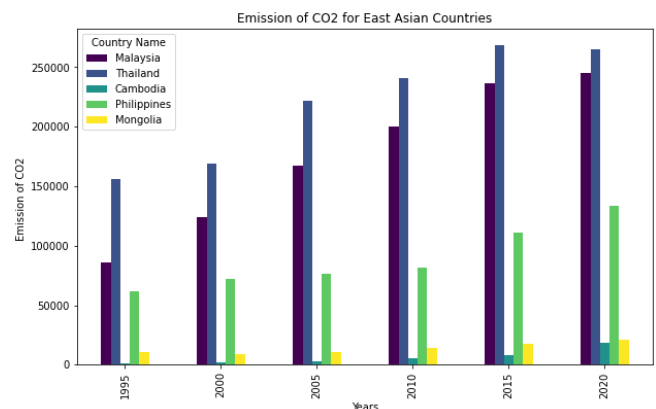
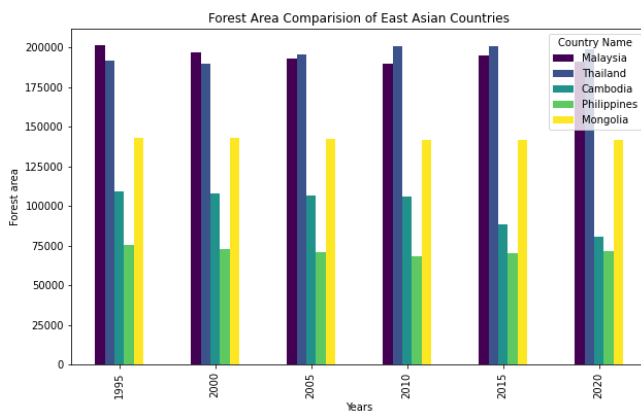
The general trend from 1970 to 2020 indicates that there is an increase in agricultural land in East Asian countries. But Mongolia being the only country which shows the decline in it. The rise in agricultural land could be because of deforestation in these countries.

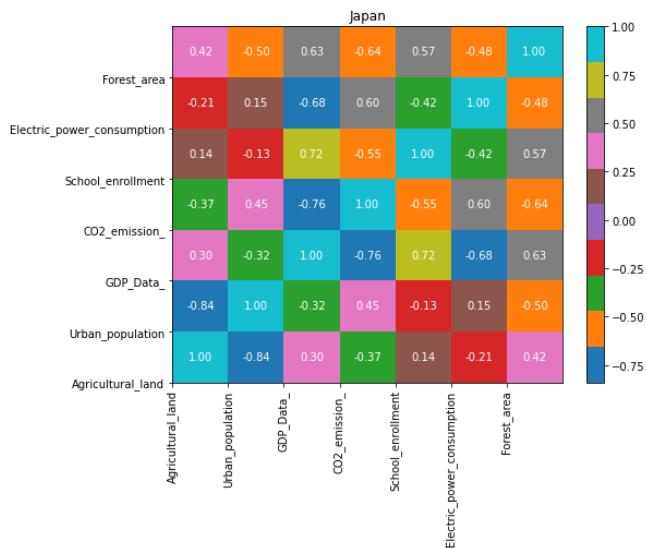


Urban Population in Philippines, Thailand and Malaysia, increased rapidly with time from 1970 to 2020. In case of Mongolia and Cambodia doesn't increase with the same rate as compared with the other countries. But its increasing which is generally followed by everywhere in the world in 1990 because of industrialization.

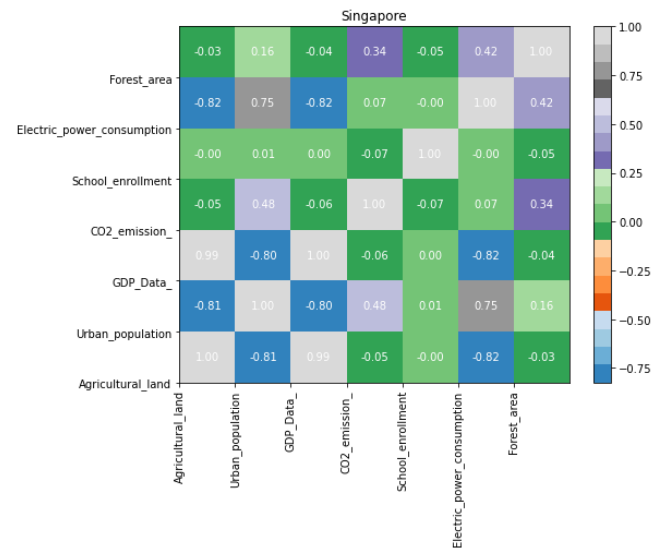
The bar graph below shows that there is not much deforestation in Mongolia and Philippines as there is no decrease in the forest area from 1995 to 2020. The forest area in Thailand shows an increasing trend since 1995. In Cambodia and Malaysia forest are declining.

In the bar graph below, we can see that the emission of greenhouse gases. The general trend is showing the rise in greenhouse gas emissions since 1995. This is because of the increase in urban population and industrialization in these countries. Thailand and Malaysia being the countries who emit the most gas.

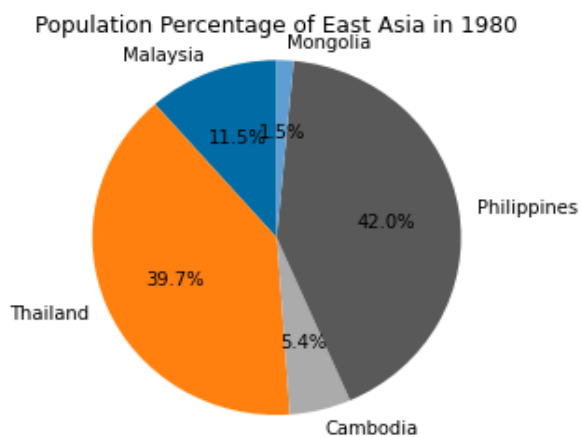




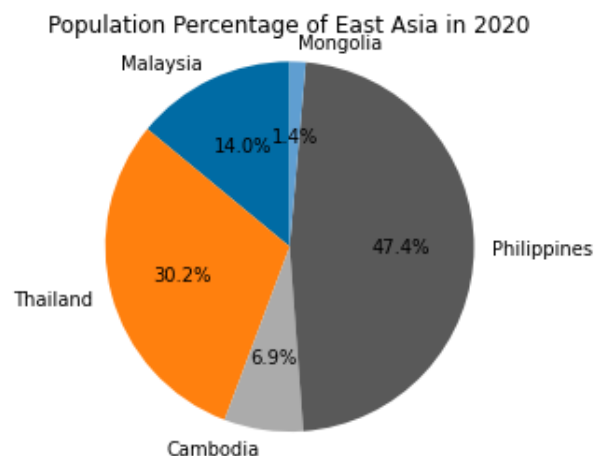
The correlation heatmap shows that the increase in urban population in Japan led to the decrease in the agricultural areas. And it also shows that it leads to the emission of more greenhouse gas. The GDP form forestry also increases with the increase in forest area. The increase in urban population also led to the decrease in forest area in Japan. And the deforestation causes the greenhouse gas emissions to increase in the country.



The heatmap in Singapore shows that the increase in in urban population leads to more electricity and emissions of greenhouse gas. However, the increase in electric power consumption is not impacting the greenhouse gas this means the electricity is being produced by renewable sources. The increase In urban population in country causes the decrease in in GDP from the agriculture forestry and fishing.



The above pie chart shows the population percentage of five countries from east Asia in 1980, Mongolia being the one with the lowest, but this could be because of there total area. However, Thailand and Philippines being the one with the highest population this was also observed in their urban population in the graphs above.



The population comparison of the five countries in 2020 shows that the proportion of population decrease with respect to other countries in Thailand and Mongolia. However, in Cambodia, Malaysia and Philippines the population percentage tends to increase

