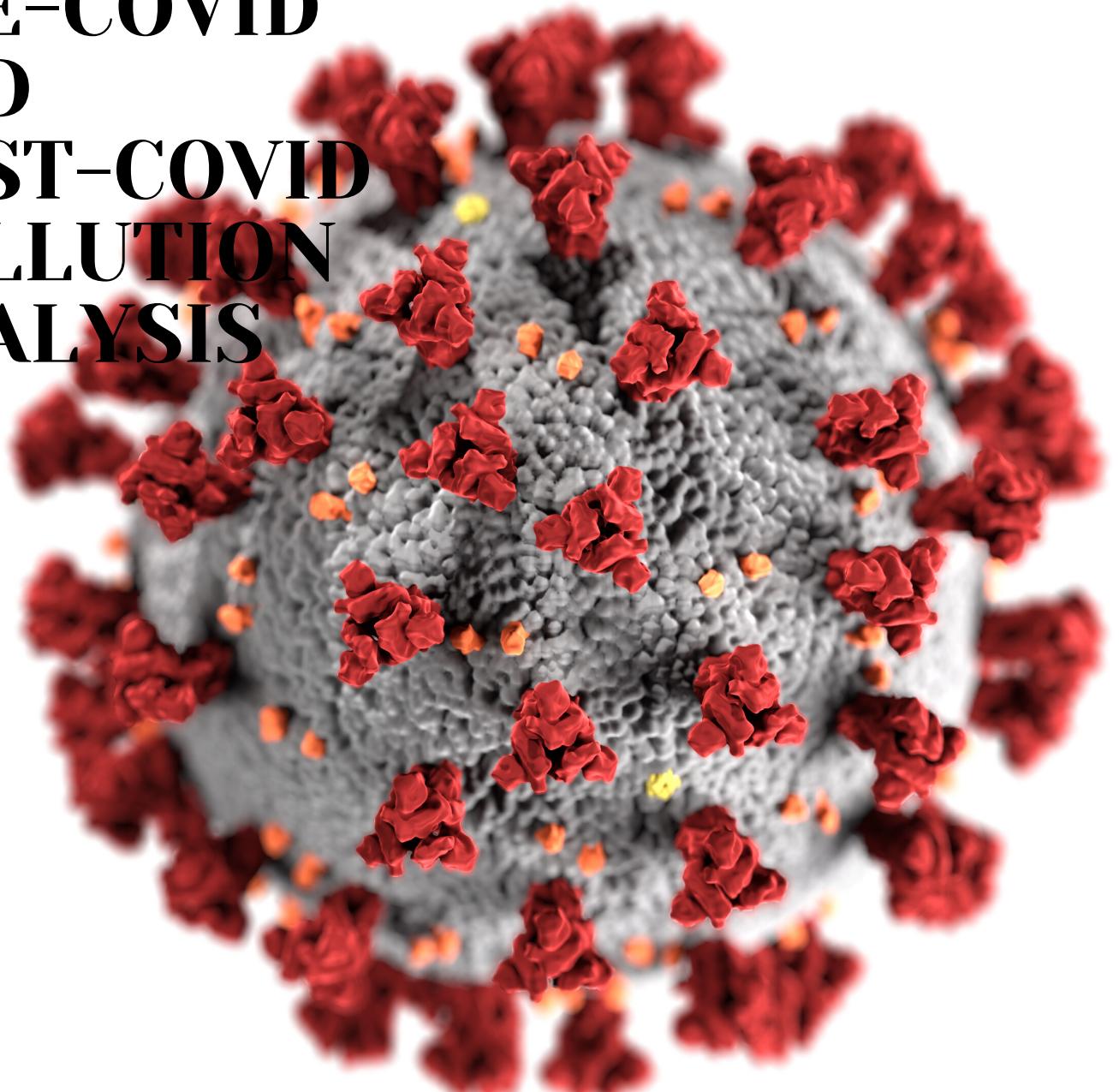


PRE-COVID AND POST-COVID POLLUTION ANALYSIS



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Shaadi times

Abstract:

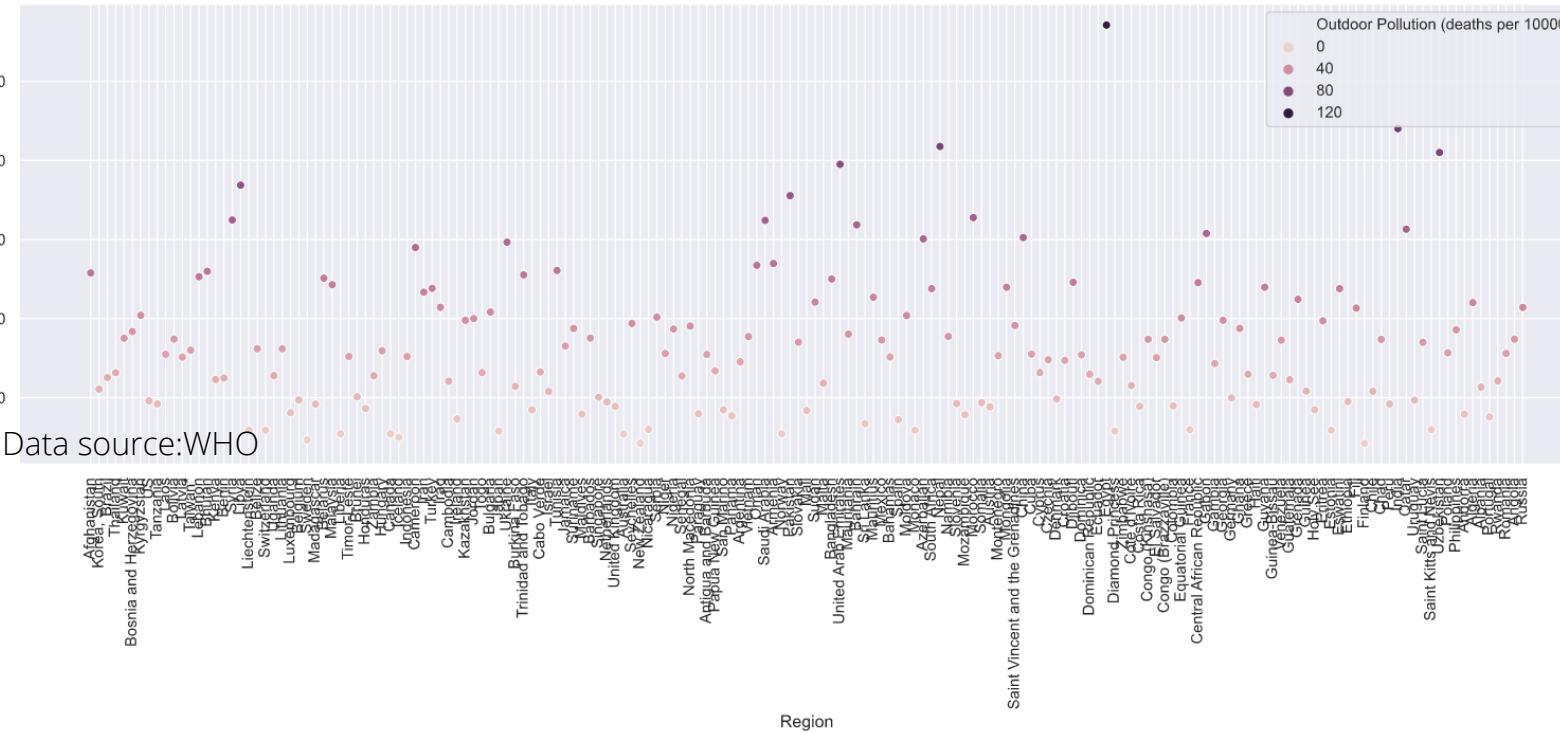
There has been a significant effect on the lives of people all over the world, due to one of the biggest pandemics world has ever seen, COVID19. It has affected more than 6M people all over the world and taken more than 350k lives all over the world and still it has not over yet. Countries all over the world suffering from this pandemic with them at most power. It made countries to go down into lockdown till the day it's been over 70 days since lockdown by most countries. Due to this lockdown, there had been good and bad things happened around, like economy deprivation faced by all over the world, and for instance, in India, it is estimated that there is a loss of over 4.5 billion dollars loss every day due to COVID19 lockdown. And coming to pros there is a significant drop of pollution all over the world due to lockdown and vehicles being locked at homes and governments encouraging people to work from home. This pandemic has surely affected the work of the world and its direction of progress. This shall be a discussion of the effect of pollution all over the world, concentrated over India.

Pre-covid Pollution crises:

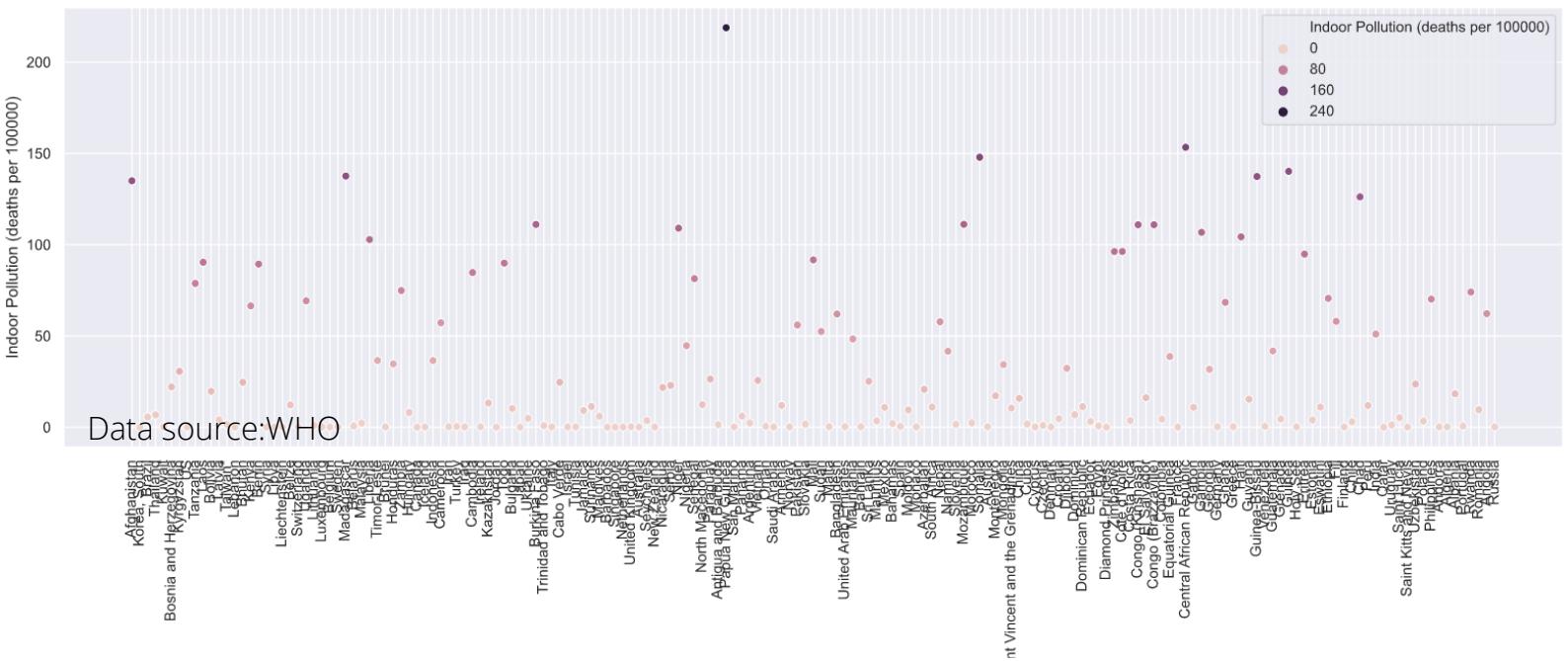
Before this pandemic, the world is fighting with many problems such as pollution, global warming and climate change, struggling to solve the problems of different sectors by world leaders .

World is having over **8000 per 100000** people deaths annually reported around world due to the cause of either indoor or outdoor pollution till 2018. Though the trend of which is decreasing in most of the countries still outdoor pollution is one of the major problems to be considered. WHO released that it is estimated to have around **7M deaths** being reported world wide either directly or indirectly which is even darker than COVID. Countries like India are still not having any positive trends being shown due to country's position in dealing poverty, awareness among people and other aspects which in great deal with the deaths reported world wide.

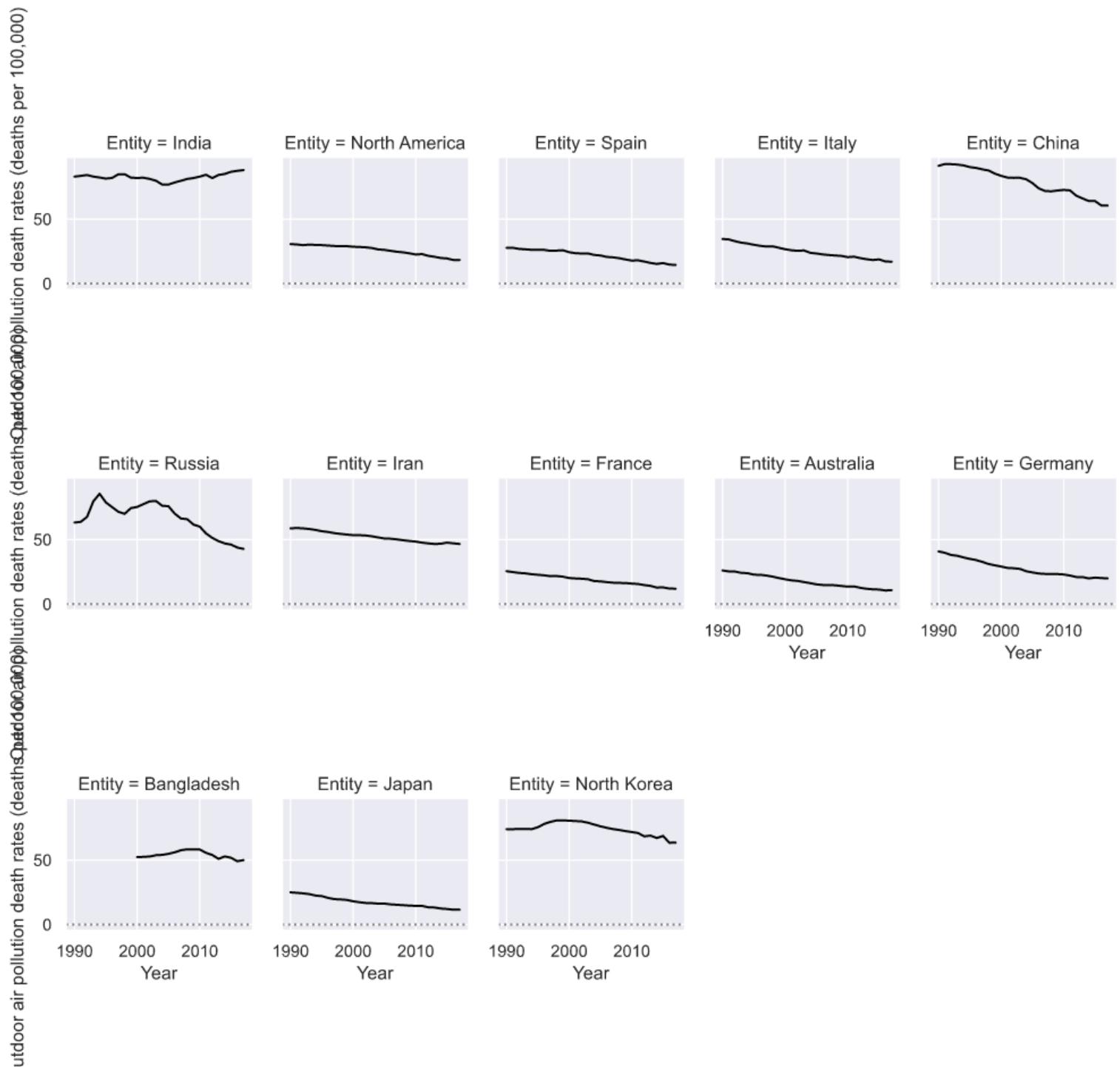
Deaths due to Outdoor pollution



Deaths due to indoor pollution

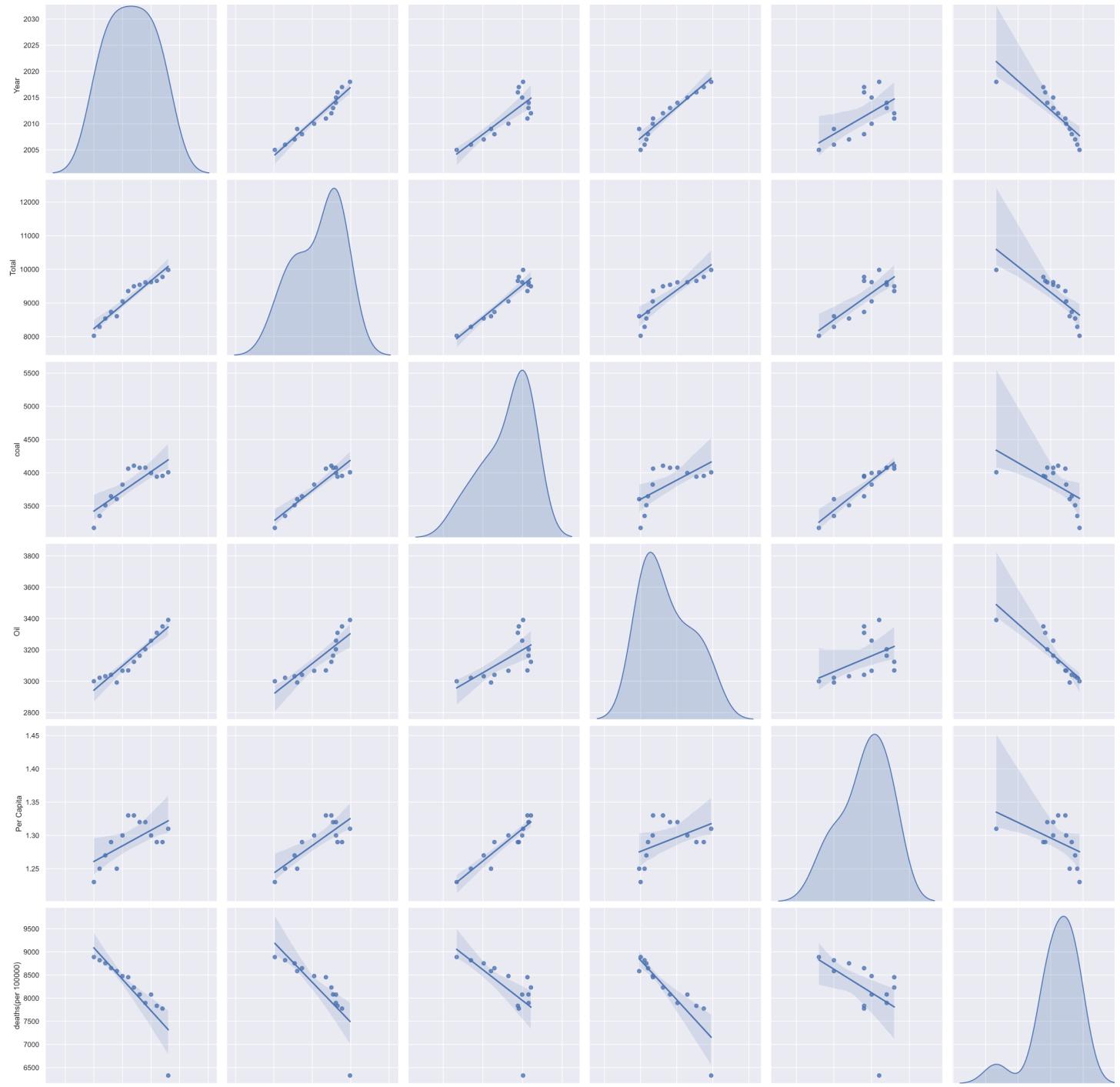


Trends shown by different countries



Trends show by different countries mostly having decreasing trend but in countries like it is increasing which is to be considered in their further action plan.

Dependencies of sources



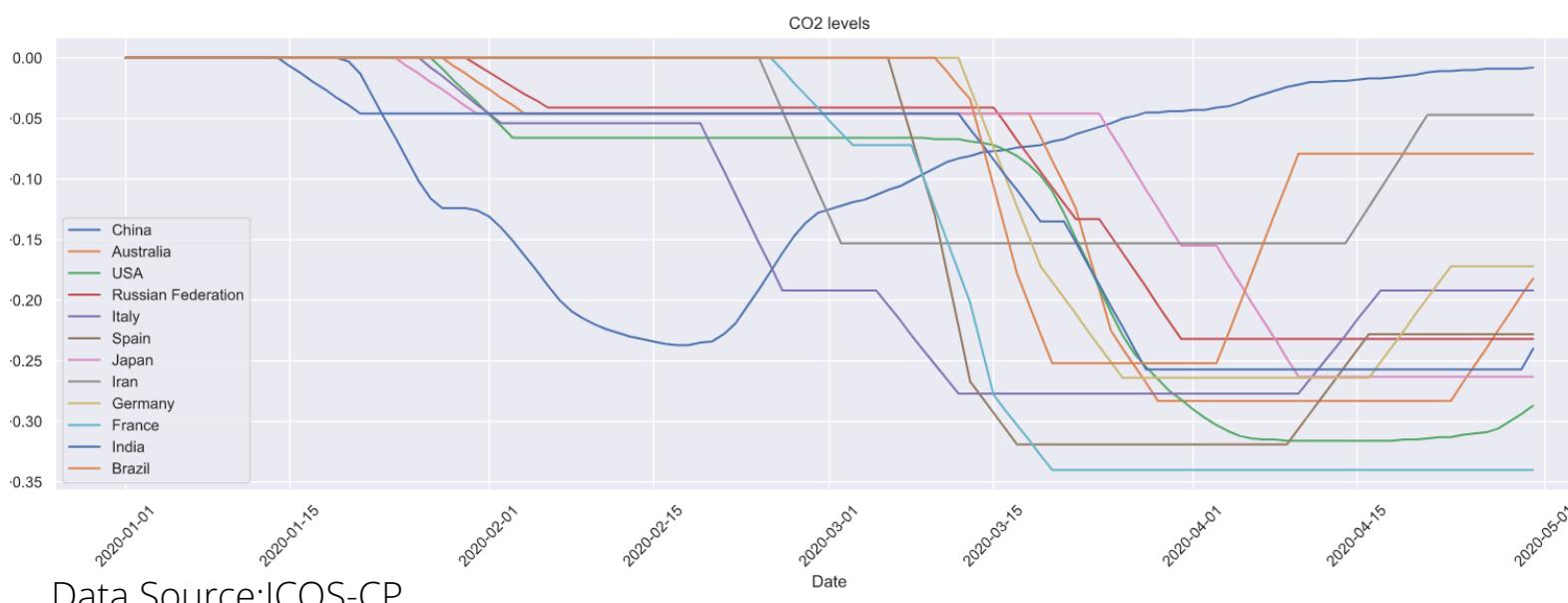
Data source :World carbon budget 2019;WHO

Dependency of various sources of pollution like coal, oil etc and their emissions mostly of CO₂ and their relation with deaths World wide .There is huge impact of pollution over human lives may it be directly or indirectly and causing humanity to cross their limits of survival.Today,hunger,poverty,climate change,pollution other than COVID are taking their lions share in affecting human lives.

Post-covid Pollution crises:

COVID has brought a wide change in the lives of humanity, may it be a positive kind or negative. The world has seen unimaginable changes in different sectors of industry. Pollution around the world has decreased with a lot of huge margins due to lockdown around the world. It is estimated to have a decrement of an **8% decline in emissions from coal**, **4.5% from oil**, and **2.3% from natural gas**. Since there are large drop-in public and private transportation all over the world and closer to industry all over the world. There is also a decrement of 20% in the world's energy demand which is because of the shutdown of different industrial sectors. Despite all these facts one of the things is affected positively, which is the environment.

Trends in CO2 emission



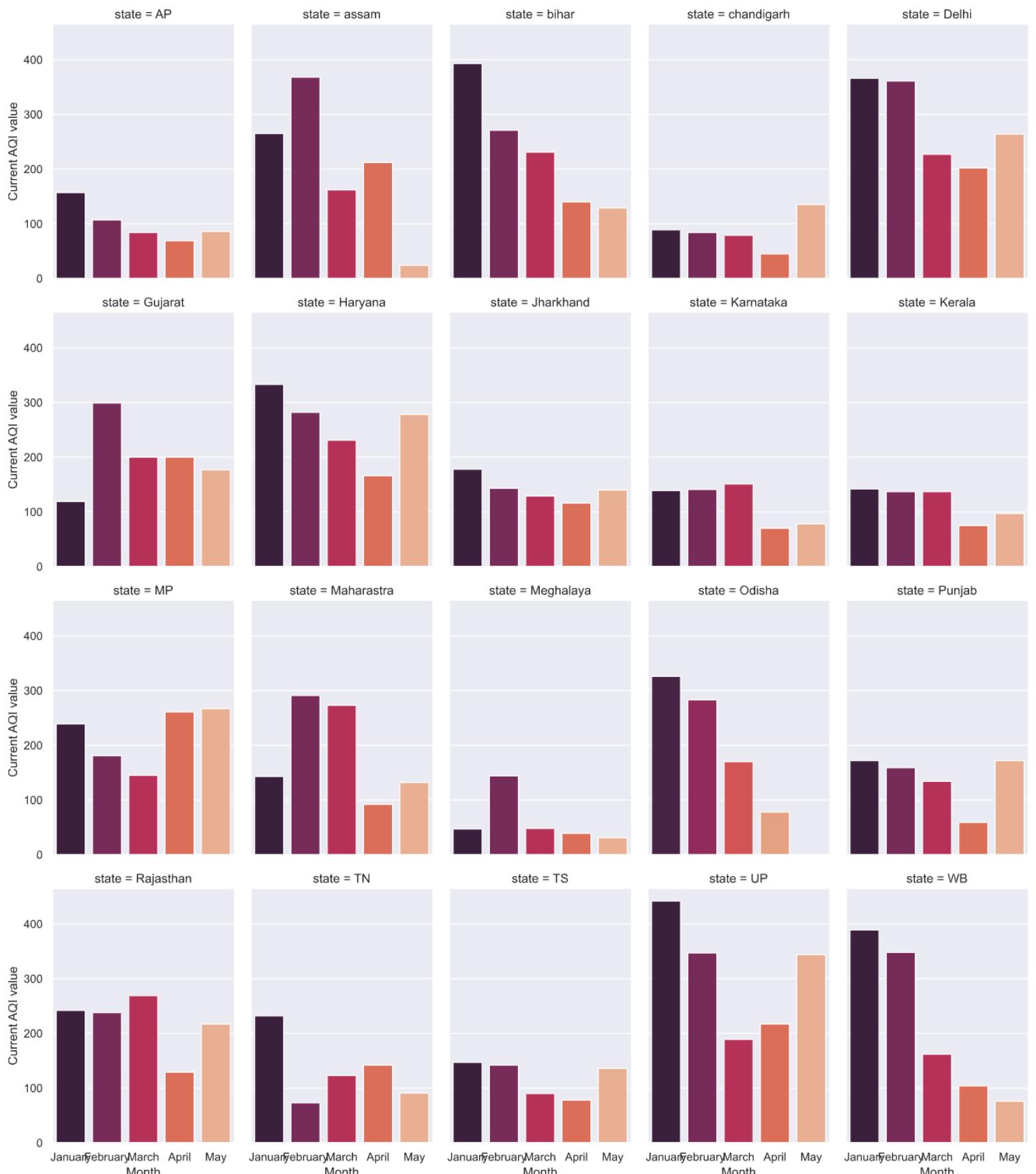
Data Source: ICOS-CP

The projection shows the percentage decrement of co2 levels in some countries trends were seen over the graph shows greater decrements of co2 levels all over the world amid lockdown making different sectors of industries to close down and also the vehicles to stuck at home being major sources of co2 .

CO2 emissions were over 5% lower in 1st quarter of 2020 than in 1st quarter of 2019, mainly due to an **8% decline in emissions from coal, 4.5% from oil and 2.3% from natural gas.** CO2 emissions fell more than energy demand, as the most carbon-intensive fuels experienced the largest declines in demand during 1st Quarter 2020.Though the change with respect to China is decreased with time as a result of gradual early lifting lockdown. Same trend could be possible by all the other countries for the coming years.

Scenario in India

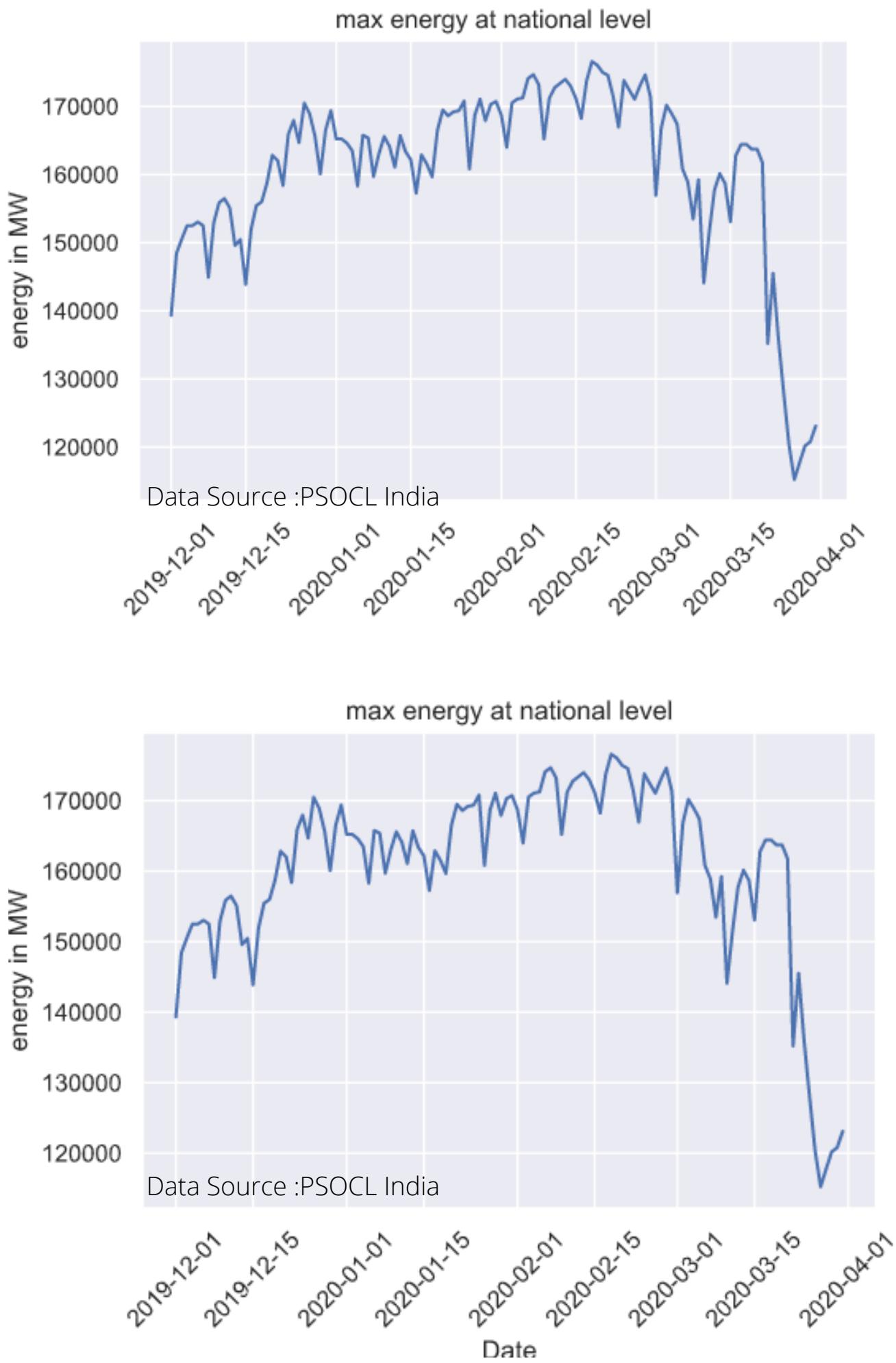
India is heading one of the most substantial changes ever seen over years, may it be closer to the industrial sector or the lockdown of 1.3B people to their homes making the economy collapse deep down ever since the depression. This has surely affected the fall of different aspects such as energy demand all over the country which in turn affected the fall of global emissions due to power blackout for the country, pollution levels due to different sectors of the industry decreased significantly.Energy has demand decreased through out the country which has decreased idemand for fossile fuels all over the country



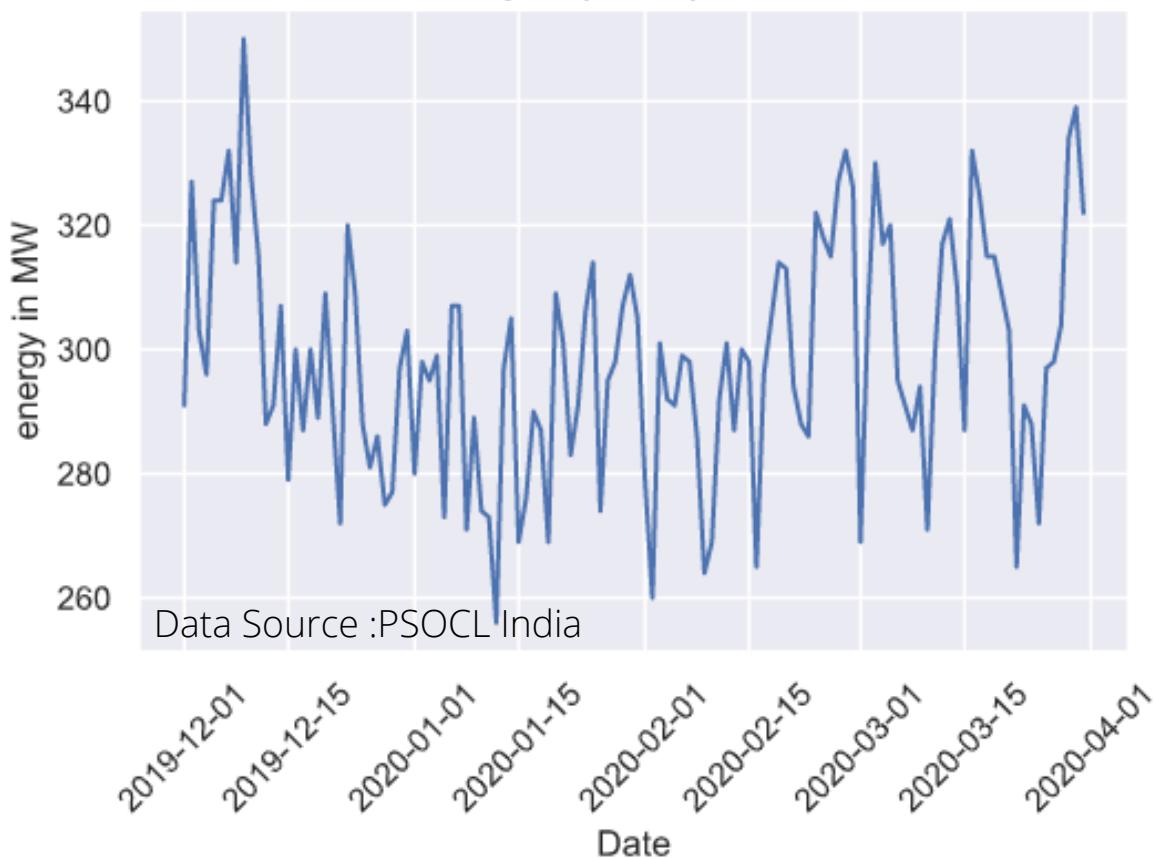
Data Source:National air quality index

AQI value of different India states taken on a particular day of every month of 2020.

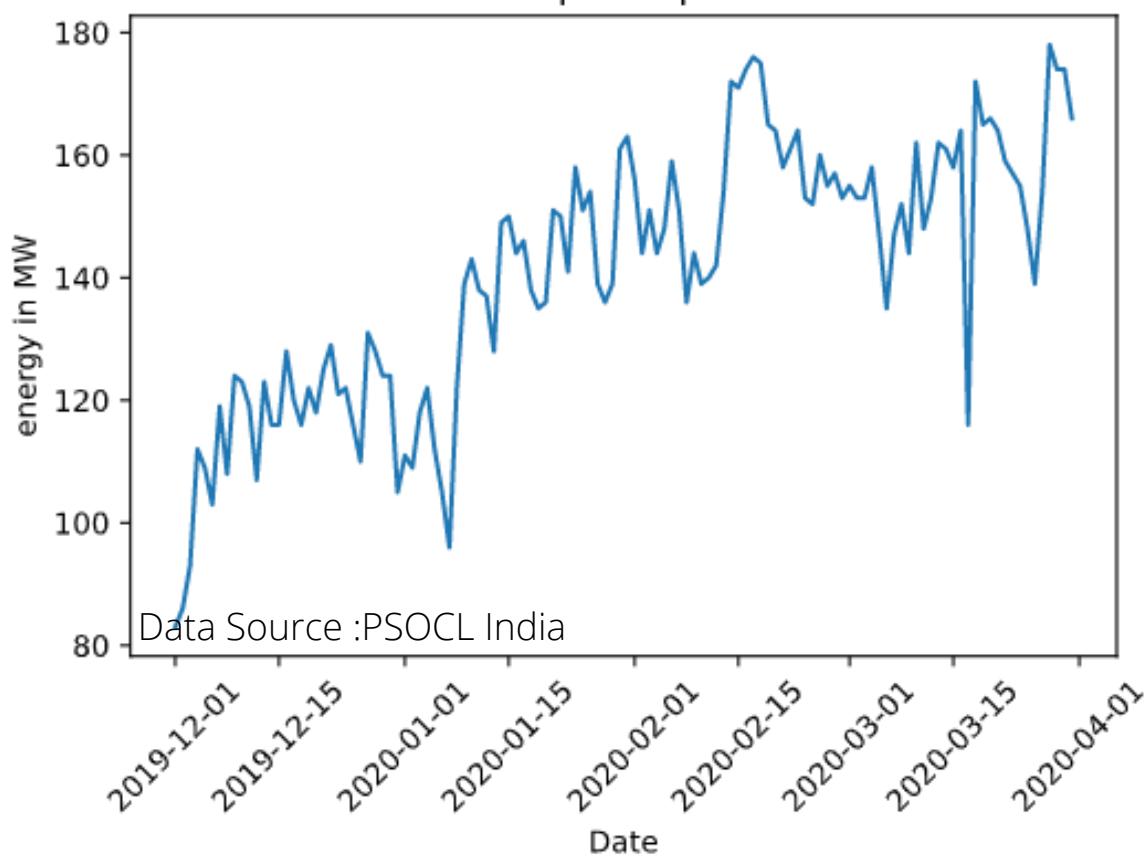
Energy demand of Country



hydro power plants



solar power plants



Power source data from Power system operation corporation limited has shown power demand and supply of different sources showing huge decrement of power demand over the months in 2020

In states like Delhi when compared with 2019 march data there is decrement of 6% demand for the energy over the state same decrement has been observed all over the country.

conclusion

There have been a lot of changes all over the world resulting in either positive or negative change. Still, this positive change may not sustain as demand chain shall increase enormously amid lockdown,to meet certain demand industries might work fully if shall lockdown lifts completely and this shall increase global surface temperatures, pollution, etc.

Even for the countries showing decreased deaths rate due to pollution would certainly increase after lifting the lockdown may it be after months from the aforementioned time. The countries must adopt sustainable development for the better future and health of its citizens.This is certainly an important parameter for the development.

References

- 1.World health organization
- 2.World Carbon project 2019
- 3.PSOCL India
- 4.National air quality index
- 5.ICOS-CP