Impact of Air Pollution on our Lives [Vehicular and Industrial Pollution to be taken as key point] - By Mahfuz Hasan

I have done forecasting of featues of environment(air) of India to try to get the better for the human lives.

Since air of different zones are different in pollution by vehicles and industries. There are some places where of pollution by vehicle are more than that of industries and vice versa.

So , to study the air as a whole will definately gives us the information but the will be generalized to each city of the country. But if we study the air of different cities of the country, we will get different trends in features which will be specific for those paricular cities.

Taking in account the above points , I have forcasted features in two ways . First I have done over the country as a whole and then for each popular cities(in vehchle or in industry) as the $2^{\rm nd}$ part.

There are 9 '.ipynb' files represnt the cities names and their forecast.

There is also a file 'india_air.ipynb' which is for Inda in general.

Important poit

1. Outputs:-

In each file there are four output graphs are there two in favour of 'NOx' gas and two in favour of 'SO2' gas.first two graphs are of 'NOx' for before coid19 and during covid19 respectively. Last two graphs are of 'SO2' for before covid and during covid19 respectively.

2. Why 'Nox' and 'SO2':-

'Nox' is mostly produced by vehcles and 'SO2' by 'Industries'

3. Graphs:-

'Orange' color graphs represent the train data and 'light Blue' represents the 'fitting and forecasted data' in each Graph. Except it other graphs are supplementry.

Out of four forecastings for each city , the order in each file are followings,

- a) first is of 'NOx' and 'before corona'
- b) 2nd is of 'Nox' and 'during corona'
- c) 3rd is of 'SO2' and 'before corona'
- d) 4th is of 'SO2' and 'during corona'

4. Trends:-

for different cities, trends of features vary because of different rules of cities towards pollutions.

5.Caution:

Forecasted data during covid19 pandemic will be considered by data set during lockdown.

Impact on human life

In genaral for India,

Since 'Nox' is at same level and slightly lower for next 1 year but during lockdown it is decreasing heavily that is because of lockdown.

There will be less effects of vehcle run in India due to covid19. 'SO2' is shifted at some lower level for next 1 year due to covid19.Because some industries will be shut down due to balanced economy. This also affects the GDP of India which may go to downwards.

Note:- This tred will be different for different cities for India.