

Gateway Of North-East India Suffering From Severe Air Pollution

Tanusree Roy
Assistant Teacher
Manikora High School

Abstract – Gateway Of North-East India Suffering From Severe Air Pollution. This article thus deals with the following objectives: To combat over the pollution; To protect over the biosphere; To purify the air quality; To promote proper traffic rules and regulations; To play active role of CPCB, Forest Department and Concerned authority.

INTRODUCTION

Siliguri is the second largest city in West Bengal and known as the gateway of North-eastern India. It sits in the foothills of the Himalayas by the side of River Mahananda. Siliguri is the only city in West Bengal other than Kolkata to have a commercial airport Bagdogra. The following airport is at a distance of 12 km and also caters the need of Sikkim. It is also the commercial capital of region. The Sub-Division is bounded on the North by the Sub-Himalayan ranges and on the South by Bangladesh, Uttar Dinajpur and Bihar, on the East lies Jalpaiguri district and Kalimpong Sub-Division and bounded on the West by Nepal. Siliguri got its Sub-Divisional status in the year 1907. Presently it has got 4 C.D Blocks namely Matigara, Phansidewa, Naxalbari and Kharibari and one corporation area Siliguri Municipal Corporation under its administrative jurisdiction. The Sub-Division comprise of 7 police station and 22 Gram Panchayets and 3 numbers of Assembly constituencies. The geographical area of the Sub-Division spreads over 837.45 sq.km and the rural population is around 815851. Population density of the city is 6000/ sq km (census,2011). The Sub-Division has got a long 19.32 km International Border with Bangladesh. Siliguri is not a very old city but it has seen waves of massive immigration over the years. It is a cosmopolitan city with a widcross section of people living peacefully upholding the traditional spirit of Indian republic. The city is situated at 122 m above sea level, having an annual rainfall of 232 cm. It is considerably cooler than the southern and Central regions of West Bengal. The temparature in summer varies from 26°-34°C and in winter 12°-24°C. The whole region is popularly famous for Tea, Timber and Tourism. Mahananda Wild Life Sanctuary and Baikunthapur Forest contribute lot in the micro climate of the town. The nearest Railway station is at New Jalpaiguri under Northern frontier railway just 3 km away from the heart of the city. The National Highway 31 and 55 connect Siliguri with other major places.

OBJECTIVES

This article thus deals with the following objectives:

- 1) To combat over the pollution
- 2) To protect over the biosphere
- 3) To purify the air quality
- 4) To promote proper traffic rules and regulations
- 5) To play active role of CPCB, Forest Department and Concerned authority.

PRESENT CONDITION

Environmental problems in Siliguri, West Bengal, are a threat to the well-being of the city's and area's inhabitants as well as the flora and fauna. The environmental condition was already deplorable due to mismanagement of water sources, increasing temperature, inexistent environmental standards and regulation of growing industrial sectors. These all had a serious impact on air pollution levels. Recently it becomes s big issue of Siliguri's air quality. It may be mentioned here that a thick haze or smog blanketed Siliguri town for almost four consecutive evenings very recently. According to Central Pollution Control Board, the pollution level has reached on alarming situation. The AQI recorded on February 13, 2018 that the air quality of Siliguri was poorer than Delhi, Ghaziabad and Faridabad, the other high pollution pockets of the country.(table 1)

PLACE	AQI
Silliguri	343.6
Ghaziabad	297.3
Faridabad	290.3
Delhi	258.6

Source:PCB 13 Feruary 2018 (table 1)

The Air Monitoring Stations at Bapupara, ward -32 under Siliguri WBPCB also examine the pollution level (table 2) on 23 March, 2018. The report reveals the impact of breathing discomfort on prolonged exposure.

POLLUTANT	AVERAGE	MINIMUM	MAXIMUM
P.M 2.5(Mg/m ³)	252	99	390
P.M 10 (Mg/m ³)	152	71	314
NO ₂ (Mg/m ³)	47	18	120
NH ₃	12	1	22
SO ₂	8	2	14
CO	20	1	107
O ₃	64	7	152

CAUSES

Over population and the ensuing overuse of scarce resources put heavy pressure on the environment. Under a research project, a team of Scientists have been monitoring the quality of air through aethalometer. They have found out that the polluted air generated in industries in northern India travel over 2000 km to reach Siliguri near the hill of queen Darjiling. A huge and thick mass of air carrying particulate matter (P M) of less than 2 micrometre, travels to West Bengal under the influence of the strong north-westerly winds. Black carbon concentration over Siliguri and Darjiling was 3.5 microgram per cubic meter. The researchers also analysed that the 43% of the founded pollutants are not locally originated. There are atleast six major pollutants such as carbon monoxide, nitrogen dioxide, ozone, particulate matter 10 mili micron or less and 2.5 mili micron, sulfur dioxide considered harmful to public health and the environment.

erated in industries in northern India travel over 2000 km to reach Siliguri near the hill of queen Darjiling. A huge erated in industries in northern India travel over 2000 km to reach Siliguri near the hill of queen Darjiling.

Heavy damage to residential areas and exposure to hazardous building rubble often mixed with all types of medical, household or industrial waste, asbestos and other hazardous substances can create the air quality worst.

The absence of professional waste management services and infrastructure could also damage the air quality. The piling up of waste in the streets and the creation of huge dumping sites could cause localised pollution.

Recently Siliguri is becoming a hotspots of contamination due to the large quantities of hazardous materials and toxic substances from medical grounds. Some times it create hazardous gases. There is significant dispute over the extent of the city's green cover. Though there is a rule for every felled tree ten saplings need to be planted. But in reality there is nothing to maintain. Though the local commuters cite diesel vehicles as the main contributor to the pollution. Experts pointed that lack of administrative effort to discipline the hawkers and traffic, the city is getting the unwanted situation. In the city, absence of new and alternative roads and fly overs lead to congestion of traffic.

State tourism minister Goutam Deb also cited vehicular load generate high diesel fumes.

IMPACTS

The polluted air is affecting the human health. Black carbon hastens the process of climate change as it leads to the melting of snow. Besides that, as the size of black carbon is very small, it can directly affect human lungs and cause several cardiovascular disorders.

Many residents complained of burning eyes, breathing problems and headache.

The AQI reveals the tiniest particle of P. M 2.5 is the ultra fine toxic harmful component and it has the ability to penetrate the deepest crevices of lungs and trigger a range of diseases. (table 3)

REMARK	AQI	POSSIBLE HEALTH IMPACTS
Good	0-50	Minimal impact
Satisfactory	51-100	Minor breathing discomfort to sensitive people
Moderate	101-200	Breathing discomfort with lungs, asthma, heart diseases.
Poor	201-300	Breathing discomfort to most people on
Very Poor	301-400	Respiratory illness on prolonged exposure
Severe	401-500	Affects healthy people and seriously impacts those with existing diseases

According to CPCB Siliguri's AQI averaged 344 between 8th to 13th February, 2018. Exposure to such conditions may cause respiratory illness on prolonged exposure.

ADAPTATIVE STRATEGY

The challenge for Siliguri is to create appropriate and effective adaptation strategies to reduce the pollution and its impacts by building resilience and resistance. Therefore, the mechanism should be introduced to check the pollution level in the town. Action needs to take place at all levels from national to local. Community based efforts should also be encouraging.

Proper traffic planning can settle down the problem.

CPCB can check the fumes of the vehicles and can make fine to filter the society.

Diesel autos should immediately be converted into gas-run ones.

The frequency of the JNNURM buses should be increased as they are low smoke emission vehicles.

The garbages and wastes should be properly filtered and dumped.

The Health Services should monitor about the surplus medical wastes.

The industrial and household rubbles should be dumped properly. Local residents are quite aware and thoughtful to deal with the problem. A resident also files RTI Act, seeking to know how the city would be pollution free and what steps the SMC and WBPCB are taking if the diesel smokes of vehicles increase the pollution. The Ministry of Environment, Forest and Climate change forwarded the letter to the CPCB to send action reports. CPCB has mentioned the alarming situation.

Moreover, to encourage the greenary can evict the problem as well as make the city more beautiful.

To tackle over the pollution, Siliguri can follow the path of our Capital, the famous odd-even traffic scheme.

CONCLUSION

A co ordinated effort with sufficient strategy, funding, expertise by States, national, humanitarian organization and local communities are needed to solve the problem making a greener Siliguri.

LIST OF ABBREVIATIONS

CPCB - Central Pollution Control Board

AQI - Air Quality Index

P M - Particulate Matter

JNNURM - Jawaharlal Nehru National Urban Renewal Mission

RTI - Right To Information Act

REFERENCES

- [1] Pollution in northern India affecting Bengal - Siliguri Times, 2 March 2016
- [2] Odd -even every month if second phase a success: Kejriwal::*IANS*. ABP Live. 15 April, 2016
- [3] Siliguri smokes into pollution top heap - Telegraph India, 15 February, 2018

