



UNDOING THE DAMAGES

CEO's NOTE



It is no surprise that among the world's 10 most polluted cities, 4 are from India. This pollution spotlight is a reminder that there should be more accountability, and it highlights the need to have a robust mechanism in place. Not long ago, residents of national capital region found themselves in a thick envelope of smog; authorities scrambled to point fingers. What became apparent soon was that it was the culmination of several irresponsible acts.

If Delhi's place has been taken over by Gwalior and Allahabad recently, it quite correctly suggests that little has been done to mitigate the human-induced air pollution. In this entire race for development, not much emphasis is being laid on the concerns leaving out some of the parameters, both at individual and organizational level. India accounts for 4.5% of the global greenhouse gas emission; claiming 1.5 million lives each year. Astonishingly, air pollution is the fifth largest killer; and in the national capital alone, poor quality of air is known to have affected 2.2 million people, a large number of it being children.

The facts alone indict us beyond any faint hope of exoneration. Currently, around 80% of the country's electricity comes from coal-based power. It accounts for 60% of the particulate matter and 45% of sulphur dioxide. However, from 2017 onwards, thermal power plants across the country will have to cut emissions by as much as 40% and reduce water consumption; and by 2030, at least 40% of electricity will be generated from non-fossil sources.

On the corporate front, integrating sustainability to business operation is already a popular trend. Tata Power's Corporate Safety, Health & Environment Department (C-SHE) is a remarkable initiative. It claims to have invested over Rs. 100 crores on pollution control equipment at its Trombay Thermal Power Plant. Such effort has set the global initiative in motion. However, to set for a course for a sustainable environment it is important that the debates and discussion now transcends into action and it would be more commendable to see the concise efforts of individuals, government and the private sector towards a common goal.

OVERVIEW

World Health Organisation Highlighted That 98% Of Cities In Low-and Middle-income Countries With More Than 100,000 Inhabitants Do Not Meet Its Air Quality Guidelines. But In High-income Countries, That Percentage Decreases To 56%. This Underlines The Risk Of Stroke, Heart Disease, Lung Cancer, And Respiratory Diseases, Including Asthma, Is On The Rise.

The Higher The Particulate Matter (pm), The Higher Are The Health Risks. Depending On Its Diameter, It Can Broadly Be Divided Into Pm 10 And Pm 2.5. Pm 2.5 Refers To Fine Particles Produced By Combustion, Including Motor Vehicles, Power Plants, Forest Fires, And Some Industrial Processes. Its Measurements Can Directly Be Linked To Estimates Of Health Risks. In High-income Countries Pm2.5 Measurements Are Widely And Frequently Performed. However, In Low-and Middle-income Countries The Measurements Usually Are Unavailable.

INDIAN PICTURE

Back home, the issue of air pollution is complex as well as diverse. Tackling it, is not merely a case of government-led policy-making; poverty is one major contributing factor. Around a quarter of the 1.6 billion people of the world with no access to electricity live in India, and another 300 million people in the country live with limited access to electricity. This suggests most of them rely on inefficient sources of energy.



Between 1990 and 2015, air pollution-related deaths rose to almost 150%. In other words, 14.7 people in every 100,000 die of ozone related illness. One alarming instance is Delhi, where half of its 4.4 million children have permanent lung damage from which they will never recover. PM2.5, with a diameter of 2.5 micron, contributed to 4.2 million deaths globally, 52% of which occurred in China and India. While ground-level ozone caused 254,000 deaths worldwide, with India accounting for 42%.

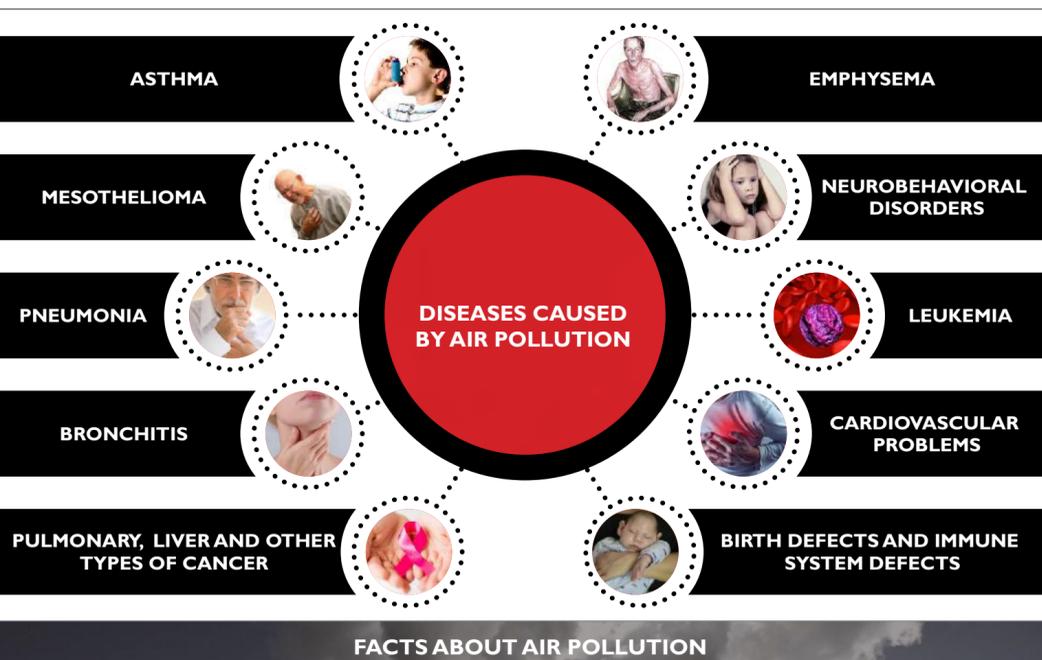
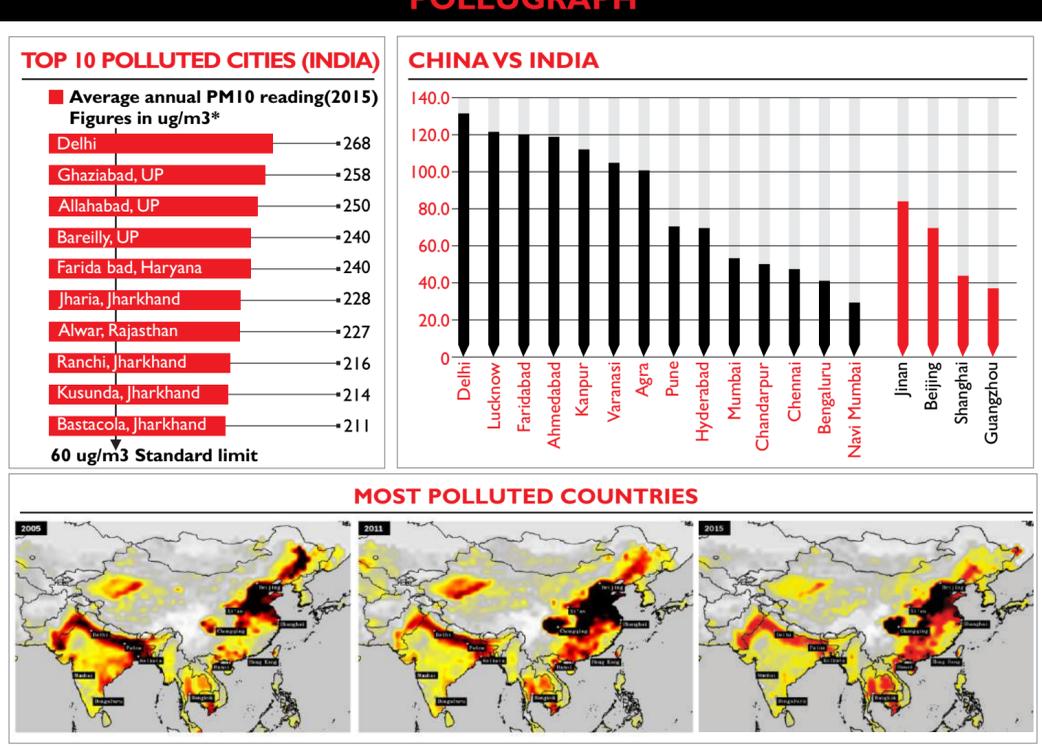
GLOBAL COMMITMENT



It is fortunate that the Paris agreement has gained some momentum already. The aim is to keep a global temperature rise this century well below 2 degree Celsius and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. 147 parties, out of 197, have ratified to the convention. India's commitment, that at least 40% of its electricity will be generated from non-fossil sources by 2030, is a decent target to start with.

Today, air pollution is recognised as an important global risk factor for diseases. Such collective recognition highlights the better understanding of the kinds of pollution in a distinct manner rather than lumping all into one.

POLLUGRAPH



- ### FACTS ABOUT AIR POLLUTION
- * India accounts for about 4.5% of global greenhouse gas emissions
 - * 4 of the most polluted 10 cities in the world are in India
 - * Air pollution is the 5th largest killer in India, claiming 1.5 million lives every year
 - * In Delhi-NCR, poor air quality is known to have affected 2.2 mn people
 - * Top 20 most polluted cities have PM 10 levels between 268 g/m3 and 168 g/m3
 - * PM2.5 contributed to 4.2 mn deaths globally, 52% of which occurred in China and India
 - * Ground-level ozone caused 254,000 deaths worldwide, with India accounting for 42%.

CORPORATIONS COMING FORWARD FOR NATURAL RESOURCES CONSERVATION : A CASE STUDY

Due to the rapid pace of urbanization, pollution in Delhi-NCR has reached alarming levels. The hazardous air quality index is not only posing threat to the nearby inhabitants but also creating negative effects on the surrounding flora and fauna. The region is considered one of the most populated and polluted territories of India. The unabated urbanization and irresponsible disposal of untreated effluent in the water bodies in the region has been severely deteriorating the potability of water. This has posed serious challenges on the adequate availability of water for meeting the rising demand. The farmers often suffer due to limited or scant rainfall in the region leading to drought. Owing to rapid urbanization and construction and hence the water table in the region has been receding rather rapidly.



India's largest multinational flexible packaging materials and solution company, Uflex Limited, has been continuing towards sustainable initiatives for the conservation of natural resources. Keeping its promise towards environmental sustainability Uflex has rolled out an intervention 'Natural Resource Conservation Initiative & Optimization of Ecosystem' in partnership with Fiinnovation, a global CSR consulting company, and AROH Foundation, a leading CSO known for its work in social development and environmental restoration for a period of 3 years.

A per the baseline survey conducted during the initial phase of intervention, in two villages of Gautam Buddha Nagar district, Uttar Pradesh, unraveled a grim picture of the water table. which was staggering low at more than 300 feet down under. The total dissolved solid (TDS) levels too were much above the normal figures ranging from 450 to 1000 ppm as compared to the prescribed limit of <75 ppm. In both the villages, the particulate matter, of more than 10 micron in size is quite above the prescribed limit of 100 µg/m3. According to the test reports the PM 10 levels in the two villages stood at 127 and 134 respectively.



Other parameters of ambient air quality, including carbon monoxide and SOx-NOx, too were very close to the prescribed limits.

Uflex Private Limited mooted the idea of undertaking and aimed at building the capacity of the villagers and other stakeholders; to conserve and optimise utilization of natural resources thereby enhancing the overall wellbeing of the inhabitants. The project involves construction in-situ and ex-situ Rain Water Harvesting (RWH) structures in the selected villages and ensuring the maintenance of these structures at community level. It also emphasizes on fostering horticulture through the plantation of fruit bearing trees(800 tree saplings in each village) on individual and community based participation model in each

of the selected villages and also safeguard them from dying apart from community training and sensitization workshops about the wise and judicious use of natural resources targeting 200 farmers.

It has so far constructed in-situ and ex-situ rainwater harvesting structures, planted trees and conducted community training and sensitization workshops And really able to connect with the community at large which is regularly monitored and evaluated on quarterly basis by Fiinnovation.

Understanding the requirements, the corporations and the government have certainly taken measures to contribute towards sustainable goals but it is important for the society as well to joins hands with them and support them in such endeavours. It would be inspiring that more corporations should add value to their CSR interventions and fight against pollution at large.

TWEETS OF THE MONTH

FOOD FOR THOUGHT

- From 2017, thermal power plants in India will have to cut emissions and reduce water consumption
- Coal-based power plants account for 60% of PM, 45% of sulphur dioxide, 30% of oxides of nitrogen and 80% of mercury

FIINOBSERVATION OF INTERNATIONAL DAYS

ABOUT FIINOVAATION

Innovative Financial Advisors Pvt. Ltd. (Fiinnovation) is a global consulting company operating in multiple disciplines of social development sector with emphasis on Corporate Social Responsibility (CSR) and Sustainability.

Fiinnovation offers end to end CSR consulting services and simplified solutions that have helped various corporations channel their resources for the benefit of community on societal, economical and ecological aspects in accordance to their CSR charter. Since 2009, Fiinnovation has grown phenomenally and has made a benchmark in the sector through its service quality. It has been able to bridge the gap between businesses and communities through value based CSR programmes in association with credible civil society organizations on Pan India basis in the field of health, environment, education and livelihood.

Fiinnovation
24/30, Ground Floor, Okhla Industrial Estate, Phase III, New Delhi - 110020
Phone: 011-42332200 | Fax : 011-42332205

www.fiinnovation.co.in

