



## RESEARCH ARTICLE

### COMPARISON OF INDIA AIR ACT WITH 3 OTHER AIR ACTS (THE UNITED KINGDOM, THE REPUBLIC OF CHINA AND PHILIPPINES)

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#### ABSTRACT

In India, always a day starts with a news story saying about the future health care. Air pollution is the strong evidence for environmental problem in India in terms of human health, causing thousands of deaths and illness which leads to a huge amount for health care expenses. Air pollution leads to deaths of many pre-mature when compared to traffic accidents but the media coverage and government action is very less in India. According to the survey conducted by Organization for Economic Cooperation and development, India consistently ranks among the most polluted country. India is responsible for Sulphur dioxide emissions, nitrogen dioxide emissions, volatile organic compounds, carbon monoxide emissions and greenhouse gas emissions. The reason for the emissions of such harmful pollutants is due to weak laws and guidelines. To reduce this pollution, level the government should take certain precautions and production and also to give strict laws to control air pollution by comparing the air pollution act with other countries we can know how strong and how weak are our laws, so that we do some amendments to finalize the laws and Act to reduce air pollution in our country. Unless India strengthens this laws and regulations, pressures from people will result in increasing hazardous air pollutants.

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## INTRODUCTION

Air pollution has proven to be the most harmful environmental problem across the world. There is great loss in terms of human health; expenditure and economic productivity every year. According to the surveys it was said that the slow-going vehicles produce 4-8 times more pollutants compared to the free-flowing vehicles. When we look into the history, village ladies used the biomass cakes, fuel wood and trash 2-3 times a day which releases smoke and also affects the health of them. And also during the autumn and winter seasons farmers of India burn their crop residue which releases a huge amount of black smoke into air and it travels a long distance affecting a wide area of people.

### Definition of Concept

Air pollution has been classified into 3 categories as below:

- "People introduce some chemicals into the air which will affect environment and living organisms. (SHRIVASTAVA)

- According to the daily usage of science the fuels which are formed from the dead plants and animals.
- "Greenhouse gas which can absorb and emit long wave radiation into the atmosphere".

### History

By the end of 18th century and start of 19th century coal has been on a wider use due to the industrial revolution. And because of this coal there is wider range of smog and soot are released into air which had very serious and severe impacts on the workers and also the residents. Also before the start of the 19th these were evidences of air pollution but it was due to lack of hygiene and sanitation. Air pollution was also caused by the Natural occurrences like volcanic eruptions. And many chemicals which emerge out of these eruptions are useful for the growth of ecosystems. By the end of 19th century the population increased and lifestyle also changed, then it has been realized that the air pollution was not because of hygiene or sanitation or natural occurrences it was due to the industries which were setup. This air pollution caused many deaths and continued till mid-20th century. It's then the pollution control laws have been come up and the air pollution has started to go down.

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## Chronology of Air pollution control legislations

- 1948 – Factories Act: it was the first act which expresses the concern about the health of workers who were working in industries.
- 1982 – Air Rules: This act explains about the procedure of the meetings of the particular boards.
- 1982 – Atomic Energy Act: This act deals with the radioactive waste which emerges out of the industries. (Tec, 2 March 2015)
- 1988 – Motor vehicles act: all the hazardous waste collected should be properly packed, labeled and transported.

### About the Clean Air Act, UK

The term “Smog” was first coined in UK derived from the words “smoke” and “fog”. During 1863 Alkali Act was first initiated in UK. There were several air problems caused by the manufacturing industries in alkali was used. The emission from these alkali plants contains hydrogen chloride which is converted into hydrochloric acid in the atmosphere and causes severe damage to the vegetation. According to this Act 95% emissions should be arrested and the remaining should be diluted. Before this Act was implemented these industries released 14,000 tons annually which was reduced to 45 tons after act was implemented. During 1874, A second Alkali Act was introduced which states that all the industrialists should apply the best practices in their industries to handle this air pollution. And in 1875 – A public health Act came up to reduce smoke/air pollution in growing urban areas. During 1900’s the Smoke Abatement Act focused on the air pollution caused by the industries but did not concentrate on the air pollution caused by the domestic sources.

### Incidents of Air pollution

When we look into the history of damages caused by the Air pollution during 1939, it was in this year a severe smog incident happened, it was a cloud of thick, black smoke ever previously not found in US. It was for 9 days resulting great loss. And then another incident happened in late October 1948, the Donora Smog is also a very thick smog which ended up in killing 20 people and sickened 7,000 people. It is then the US decided to trigger for the clean air movement and thus in 1956, the Clean Air Act was passed by the UK Government which produces measures to reduce air pollution. Later on, 1963, this legislation was further improved and authorized research into methods which monitor and control air pollution. And in 1967 the Air Quality Act was introduced by the Government to check on the amount of pollutants released by the transportation and necessary inspections should be carried out. And in 1970, this Clean Air Act was very much expanded across the world and under this legislation the Environmental Protection Agency (EPA) came up. In 1990, EPA’s main motto is to set standards for pollution prevention and gives new powers to the local authorities of each place to check upon these standards. If any violation beyond these standards, necessary actions can be taken by these local authorities.

### About the Air Act, 1981 in India

This act is introduced so as to provide for prevention and control of air pollution in the country so as to maintain the quality of air.

## History of Air Act

During the British rule, Indian people saw many laws related to Environment. Out of these, the first laws which were related to the air pollution they are: Shore Nuisance (Bombay and Kolaba) Act, 1853 and the Oriental Gas company Act, 1857. And also according to the Indian penal Code 1860, anyone can be imposed a fine if he/she founds fouling the public water, springs or reservoirs. Along with these laws British also introduced few laws which are related to air pollution. Among these air laws – Bengal Smoke Nuisance Act, 1905 and Bombay Smoke Nuisance Act, 1912 were prominent. But these laws failed to show the effect on reduction of air pollution. After the independence, India formed a constitution and took the laws formed by the British to protect the Environment. India formed its constitution in 1976. Under Article 48(A) of part 4 states that each State shall be responsible to protect and improve Environment and safeguard all the types of forests of Country. When we see into the recent history the constitution includes the Water Act, 1974; Forest Act, 1980; Air Act, 1981. This Air Act was formed after the decisions were taken at the UN on human Environment held in Stockholm, June 1972 in which India also took part. These decisions include to take proper steps in the preservation of natural resources on the earth and also includes the preserving the quality of air and control of air pollution.

### Congress into Air Act

After the incident of “Smog” in Pennsylvania, such accidents alerted that air pollution is a very serious problem and can affect the human health. Several laws including Clean Air Act, 1963 were introduced and is also funded for studying and reducing the air pollution. But no such effective response came up until the congress came into picture and made the clean Air Act, 1970 much stronger. It is during the same year EPA was introduced by Congress and gave a primary role. Since this year, EPA is responsible to produce variety of methods/programs in reducing the air pollution. And in 1990 Congress expanded EPA and gave much broader authorities in reducing air pollution.

### Salient Features of Air Act

Under this Air Act Central Pollution Control Board (CPCB) and State Pollution Control Board (SPCB) were introduced which are responsible to check the air pollution of that particular state. And as per provisions in sec 21(2) no one can setup the industry without permission from SPCB and should follow and fill the necessary formalities. Then the SPCB will either grant the permission or refuse the permission. Under Sec 22(A) if the industry releases pollutants beyond the standards the SPCB can cancel their license and cease the property.

### Penalties of the Air Act

Whoever fails to follow the above mentioned sec 21,22 they are imprisoned for one and half year which also can extend up to 6 years and also should pay the fine ; if further delay continues 5000/- per day. According to the annual report of 2010-11 the air quality network has 411 operating stations covering 167 cities/towns under 26 states and 5 union territories.

### The Republic of China Clean Air Act

In China the clean Air Act was introduced in 1987, but it did not have any impact on reducing the air pollution. It did not

concentrate on any of the particular particles which are responsible for air pollution. All most all the cities of China remain under this air pollution every day. This termed as "Fog" in China. In China, days without fog are celebrated as "Blue Sky days". In China many business people very fastly realized the advantages of the clean air act. They felt that if the country is clean, it has more opportunities in increasing the number of workers and economy for the country. According to the World Health Organization report of 2007 the air pollution killed 6, 56,000 of Chinese every year. This estimation equals to 10 times the number of people who died in Hiroshima bomb attack. Only after a dramatic event, many countries setup the clean air acts. Thus, when the China took air pollution problem seriously and introduced more towards to reduce the fog.

### Significance of China Air Act

This clean Air Act of China has been amended on April 2000. According to the article 1- this act is formed to preserve air quality, reduce air pollution and prevent people's health. (Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution, amended on April 29, 2000) According to the article 2 –The state government and local authorities are responsible for their check on air quality of their particular area. According to the article 5 – Each and every citizen are responsible to protect the environment and reduce the air pollution. China has setup the control action plan over the air pollution which reduces up to 25% of air pollution by 2017 when compared to 2012 levels.

### Philippines Clean Air Act

RA 8749 is also called as Philippine Clean Air Act which was introduced in June 29, 1999. This air act addresses the declining position of air quality due to the rapid growth of industrialization. This clean Air Act is important in this country so that its people can have better lives, better employment opportunities and increased economic growth of the country. Its main motto is to promote public information and include air quality measures in education so as to improve individual's participation. Comparison between UK, India, China and Philippines Air Acts: When we look into EPA system of UK, this sets the national air quality standards for particular pollutants so that they don't extend the particular limit. In this particular system, the state or local body is not responsible to setup the standards. But where as in China, the state Government is responsible to setup the standards of pollutants for national air quality. Under the UK Clean Air act, the person he/she who pollutes the atmosphere is liable to be imposed fines. (R. BOYD, 2006). In China, it goes little further, the person who sets up industries without permission is liable to be imprisoned and cancel their license and daily fines. The Clean Air Act of UK saved 2, 00,000 lives and prevented 18 million childhood respiratory illness and increased economic benefits of the nation. When compared to China, India may be lagging behind but in environment terms it over took China's air pollution. (Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution, amended on April 29, 2000). Out of the 20 most world's polluted cities, 13 are from India and 3 are from China.

Air pollution in India brings down 3.2 years' life expectancy, who lives in cities. Over the past decade, the 2 nations India and China has seen faster economic growth as well as faster depletion in environment.

### Conclusion

It is very difficult to compare the legislation between regions, in terms of the emission limits from processes and the relative burden to industry. The emissions and air quality limits and legislation in developed countries are generally stricter and more extensively enforced than in some of the major developing countries that are competing, or expected to compete with Europe in future years, notably in India and China. However, the pressure to improve air quality in such countries is becoming much greater and extensive air quality improvement programmers are in place. When compared with other industrialized nations such as UK., China, and Philippines the air quality norms and standards are weaker in our India. The government of India must establish the standards which are legally strong regarding this air quality so that it provides the health assurance for the Indian citizens. By reducing air pollution, India has the ability to save thousands of lives, prevent millions of cases of illness, and save billions of Rupees. By establishing national targets and standards, India will be in a much stronger position vis-à-vis the U.S. in ongoing bilateral negotiations about air pollution. Laws and policies that reduce air pollution will generally help to address climate change and vice versa. Where possible, policies and actions intended to improve India's air quality should also attempt to maximize reductions in greenhouse gas emissions.

### REFERENCES

- Amended on April 29, 2000. Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution. China: Government of China  
<http://envfor.nic.in/legis/air/air1.html>  
[http://hspcb.gov.in/Air\\_Act.html](http://hspcb.gov.in/Air_Act.html)  
<http://www.chanrobles.com/philippinecleanairact.htm#.WLXa1e26zIX>  
<http://www.downtoearth.org.in/blog/lessons-delhi-could-learn-from-beijing-to-clean-up-its-air-act-43425>  
<http://www.lawyersclubindia.com/articles/Powers-Functions-of-Air-Pollution-Control-Board-under-Air-Act-1981-5174.asp#.VBfOUfkVsaw>  
[http://www.vanashakti.in/air\\_act\\_1981.html](http://www.vanashakti.in/air_act_1981.html)  
<https://www.nrdc.org/experts/peter-lehner/why-china-needs-stronger-clean-air-act-and-so-do-we>  
 R. BOYD, D. 2006. The Air We Breathe an International Comparison of Air Quality Standards And Guidelines . Canada: A Report Prepared For The Davis suzuki foundation helath and environment series .  
 Shrivastava, D. R. (n.d.). Pollution Control Acts And Regulations Of India . Slide share .  
 Shrivastava, D. R. Sep 26, 2015. Pollution control acts in India. India : Slide share.  
 Tec, L. 2 March 2015. A COMPARISON OF AIR IN THE 19TH AND 20TH CENTURY. Prezi.

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