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## How Does Air Pollution Threaten Basic Human Rights? The Case Study of Bulgaria

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### Abstract

The main purpose of this article is to analyze the relationship between air pollution and human rights. It investigates whether air pollution threatens basic human rights such as the right to health, life, and the environment. Air pollution represents a major threat both to health and to the environment. Despite the adoption of numerous international, national and regional norms, air pollution still continues to be one of the major environmental issues of concern. The human rights to life, health, and a clean environment are powerful tools available for citizens to strengthen the enforcement of existing laws and regulations and combat air pollution. This study examines the case of air pollution in Bulgaria and how it can be related to human rights threat. Findings of the study are prerequisite to conclude that air pollution threatens some of the fundamental human rights such as the right to life, health, and the environment.

**Key words:** Air pollution, Human rights, Human rights threat, Air pollution in Bulgaria

### Introduction

Air pollution over the past decades is a worldwide problem. With the increase of the population, globalization, and industrialization, air pollution has become one of the major environmental issues of concern (Fenghua et. al., 2015), (Zhang et. al., 2011), (Cramer, 2002). Millions of premature deaths occur each year as a result of exposure to air pollutants. A wide range of adverse effects of air pollution on health has been well documented by studies conducted in various parts of the world (Jonathan et. al., 2012), (Solomon, 2011), (Clark et. al., 2010), (Goldsmith, 1964). The latest assessment by WHO's International Agency for Research on Cancer (IARC) concluded that worldwide seven million premature deaths annually is linked to air pollution (Jasarevic et. al., 2014). In addition to the impacts on human health, air pollution also causes environmental degradation such as acid rain, eutrophication, haze, ozone depletion, crop and forest damage, and global climate change (UNEP, 2011), (EEA, 2014).

Clean air is considered to be a basic requirement of human health and well-being (WHO, 2000). However, air pollution continues to pose a significant threat to health and environment worldwide. All human beings depend on the environment in which we live. A safe, clean, healthy, and sustainable environment is integral to the full enjoyment of a wide range of human rights, including the right to life, health, food, water and safe environment (UNHRC, 2012). Without a healthy environment, we are unable to fulfill our aspirations or even live at a level commensurate with minimum standards of human dignity (Bank, 2014).

In recent years, the recognition of the links between environment and human rights has greatly increased. Human rights and environmental norms are powerful tools to combat air pollution and its impact on health and the environment. The dependence of human rights on environmental quality has been recognised in international texts and by human rights treaty bodies (Guillerm and Cezari, 2013). The number and scope of international and domestic laws, judicial decisions, and academic studies on the relationship between the environment and human rights have grown rapidly. The records of the United Nation Human Rights Council on Human Rights and Environment, The Rio Declaration on Human Environment, and Stockholm Declaration on Environment and Development, and others give basic guidelines for understanding the relationship between human rights and the environment. Many studies have concluded that environmental degradation threatens basic human rights (Akyuz, 2015), (Boyd, 2012), (Amechi, 2009), (Fitzmaurice et. al., 2007).

The main objective of this study is to analyze the relationship between air pollution and human rights and to outline how air pollution can be related to threat to basic human rights such as the right to life, health, and

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environment. This objective is achieved through two main steps. First, looking at the concept of human rights and finding the linkage with air pollution. Second, looking at the air pollution in Bulgaria as a case study, and discussing how it threatens basic human rights.

## **Human Rights Concept and the Linkage with Air Pollution**

Human rights are set of essential and fundamental rights inherent to all human beings, regardless their nationality, place of residence, national or ethnic origin, colour, religion, language, or any other status. These rights are all interrelated, interdependent and indivisible. Universal human rights are often expressed and guaranteed by law, in the forms of treaties, customary international law, general principles and other sources of international law. International human rights law lays down obligations of Governments to act in certain ways or to refrain from certain acts, in order to promote and protect human rights and fundamental freedoms of individuals or groups (UN, 2008). The international doctrine of human rights is one of the most ambitious parts of the settlement of World War II. These rights were first recognised internationally under the Universal Declaration of Human Rights, and specified by the United Nations in 1948 to provide a global understanding of how the individuals should be treated (Sachs, 2004 and Clemson, 2012). Since then, the language of human rights has become a common language of practice of human rights for guidance in understanding the central idea. Only recently, during the second half of the 20<sup>th</sup> century, the right of the third generation has started to be recognized where the right for a clean environment has become more prominent.

Due to the increase of environmental degradation and deterioration in many parts of the world, environmental issues have become a topic of vigorous debate. As a consequence, many international treaties, national laws and regulations for environmental protection have been introduced and adopted. In 1976, Portugal became the first country to adopt a constitutional “*right to a healthy and ecologically balanced human environment*”. Since then, more States have adopted similar rights in their national constitutions (Boyd, 2011). Most of the constitutional rights refer to health; alternative formulations include rights to a clean, safe, favourable or wholesome environment (Knox, 2012). In general, the environment and human rights are inherently interlinked.

A clean environment is a basic condition for the enjoyment of a full range of human rights. Everyone needs access to clean air, safe water, fertile soil, and nutritious food in order to survive. Nothing is more basic to life than having access to clean air to breathe. In recent years, there has been more of an awareness of the links between human rights and clean air. There has been recognition that a clean and healthy environment is essential to the realization of fundamental human rights. Can this recognition be used as a tool to fight air pollution and achieve better air quality, which is an essential part of the clean environment? Human rights are grounded in respect for fundamental human attributes such as dignity, equality, and liberty. The realization of these attributes depends on an environment that allows them to flourish. Health as a human right cannot be imagined without clean air. United Nations Human Resource Council states: “Atmospheric - related environmental impacts are becoming more predominant as a result of increasing human activity, population growth and continued economic growth. These activities exacerbate atmospheric emissions, leading to air pollution, climate change and ozone-layer depletion which are major environmental threats to human rights” (UNHRC, 2011). Air pollution threat to human rights is going to be discussed looking at the case study of Bulgaria.

## **Air Pollution in Bulgaria and Human Rights Threat**

According to the latest released data by the European Environment Agency (2013), Bulgaria is one of the worst air polluted countries among all EU Member States (EEA, 2015). It also has one of the highest rates of premature deaths due to air pollution (UNEP, 2015). Air pollutants - sulphur dioxide, nitrogen dioxide, particulate matter (PM<sub>10</sub>, PM<sub>2.5</sub>), and carbon monoxide, cause respiratory, cardiovascular, and heart related diseases. As a result, thousands of people die prematurely. The Environmental burden of disease calculations of the WHO show that 3,400 Bulgarians die annually because of air pollution (WHO, 2009).

The latest assessment made by the European Environment Agency for air quality in the European Union showed that air quality in Bulgaria was a big concern. According to the realized data, citizens all over the country breathed in air that is considered harmful to health. For example, concentrations of PM<sub>10</sub> (particulate matter) were much higher than what the EU and the World Health Organization have set to protect health. This can be seen from the following figure, published by European Environment Agency.

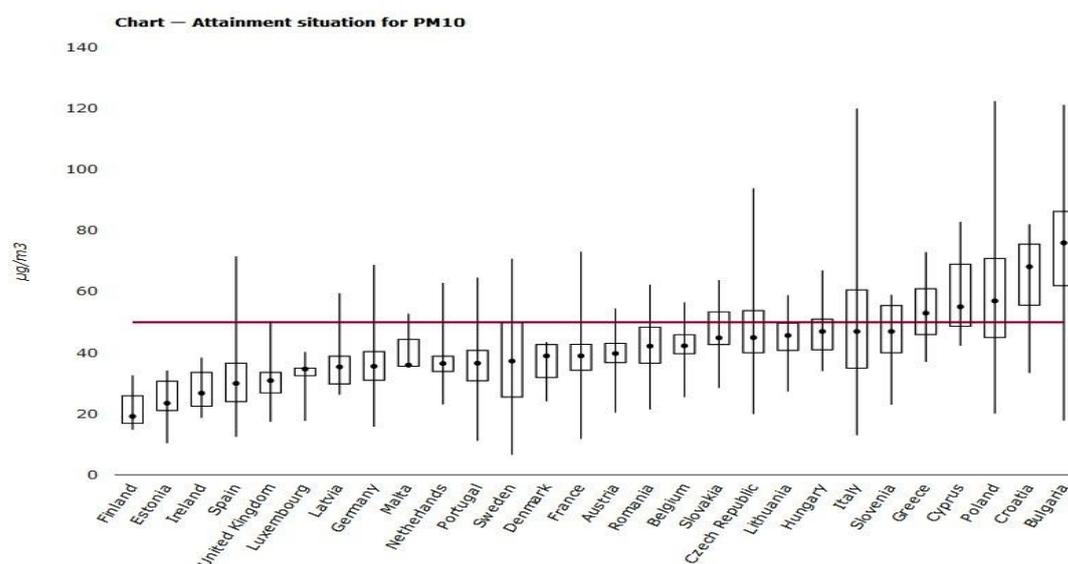


Figure 1. Attainment situation for Partuculate Matter  $_{10}$  (PM $_{10}$ ) in different EU countries

**Source:** European Environment Agency, air quality e-reporting database. Data for 2011 - 2013

**Note:** The graph is based, for each Member State, on the 90.4 percentile of daily mean concentration values corresponding to the 36<sup>th</sup> highest daily mean. For each country, the lowest, highest and median percentile 90.4 values (in  $\mu\text{g}/\text{m}^3$ ) at the stations are given. The rectangles mark the 25 and 75 percentiles. At 25% of the stations, levels are below the lower percentile; at 25% of the stations, concentrations are above the upper percentile. The daily limit value set by EU legislation is marked by the red line.

Data provided by Executive Environment Agency (2016) of Bulgaria about the levels of certain key parameters, characterizing air quality, in accordance with the national and European legislation, shows exceedance of PM $_{10}$  to present date in 2016. Bulgarian citizens still breathe in air that is not matching the air quality standards set by the European Union.

Table 1. Exceedance of Air Quality (AQ) limit values in Bulgaria

Exceedances of AQ limit values (LV) for sulphur dioxide, nitrogen dioxide, particulate matter (PM10), ozone and carbon monoxide in ambient air within the period from 00:00 to 24:00, 29.02.2016 /Bulgaria

Settlement / Station	SO <sub>2</sub>		NO <sub>2</sub>		PM <sub>10</sub>	CO	O <sub>3</sub>	Information threshold
	1h LV	24h LV	1h LV	24h LV	LV (8h)			
	350.0 $\mu\text{g}/\text{m}^3$	125.0 $\mu\text{g}/\text{m}^3$	200.0 $\mu\text{g}/\text{m}^3$	50.0 $\mu\text{g}/\text{m}^3$	10.0 $\text{mg}/\text{m}^3$	180.0 $\mu\text{g}/\text{m}^3$		
Nesebar					1.35			
Vidin					1.33			
Pleven					1.25			
Plovdiv - Kamenitsa					1.05			
Plovdiv - zh.k. Trakia					1.34			
Stara Zagora - Zelen Klin					1.17			

**Source:** Executive Environment Agency Bulgaria, National System for Air Quality Control

Is breathing clean air a human right? In order to understand the relationship between air pollution and human rights threat, three basic human rights are going to be discussed – the right to life, health, and the environment.

### **The Right to Life and Health**

Thousands of people die each year from air pollution in Bulgaria. Is the right to life a basic human right? In this regard the Universal Declaration of Human Rights, Article 3 states that *“Everyone has the right to life, liberty and security of person”*. Furthermore, the International Covenant on Civil and Political Rights, adopted in December 1966 protects the right to life in Article 6. (1), which is stated as follows: *“Every human being has the inherent right to life”*. The right to life is at the core of all other types of rights and it is constantly interpreted to include environmental distresses. The European Commission on Human Rights has adopted an approach where its member states are required to take positive measures to ensure that right to life is sufficiently respected and guaranteed (Leib, 2011). Therefore, the right to life which is described in Article 2 of the European Convention states *“Everyone’s right to life shall be protected by law”*.

The right to health is also a fundamental part of our human rights and of our understanding of a life in dignity. The right to enjoyment of the highest attainable standard of health is not new. Internationally, it was first articulated in the 1946 Constitution of the World Health Organization, where states that *“The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition”*. The 1948 Universal Declaration of Human Rights also mentioned health as part of the right to an adequate standard of living in Article 25.(1) - *“Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, . . . .”*. The right to health was again recognized as a human right in the 1966 International Covenant on Economic, Social and Cultural Rights where Article 12 states *“The right of everyone to the enjoyment of the highest attainable standard of physical and mental health”*. The right to health is furthermore recognized in several regional instruments, such as the African Charter on Human and Peoples’ Rights (1981), the Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights, known as the Protocol of San Salvador (1988), and the European Social Charter (1961, revised in 1996). The American Convention on Human Rights (1969) and the European Convention for the Promotion of Human Rights and Fundamental Freedoms (1950) contain provisions related to health, such as the right to life. The right to health is relevant to all States. Every State has ratified at least one international human rights treaty recognizing the right to health. Moreover, States have committed themselves to protecting this right through international declarations, domestic legislation and policies, and at international conferences. Air pollution in Bulgaria causes health related illnesses which lead to premature death and this way threatens the above mentioned two fundamental human rights – the right to life and health.

### **The Right to a Clean Environment**

Air pollution causes not only health related problems but also environmental degradation such as acid rain, eutrophication, haze, ozone depletion, crop and forest damage, and global climate change (UNEP, 2011), (EEA, 2014). Is healthy environment (which includes clean air) a human right? The relationship between the environment and human rights are mentioned for the first time in the 1970s. The first UN Conference on the Human Environment, which took place in Stockholm, shed light on the relationship between human rights and the environment. Indeed, the preamble to the Stockholm Declaration proclaims that:

Both aspects of man’s environment, the natural and manmade, are essential to his well-being and to the enjoyment of basic human rights – even the right to life itself.

Further on, Principle 1 of the Stockholm Declaration established a foundation for linking human rights, health, and environmental, declaring that:

Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being . . .

Furthermore, the 1992 Rio de Janeiro Conference on Environment and Development (UNCED) focused on the link that exists between human rights and the environment in terms of procedural rights. Despite the fact that the 1992 Rio Declaration does not grant the right to a clean environment directly, it places emphasis on the importance of nature. It states that *“human beings . . . . are entitled to a healthy life in harmony with nature”*.

As a matter of fundamental human right, the importance of adequate environment was also enunciated in the 1987 Brundtland Commission Report ("Our Common Future"). The Brundtland Commission included a set of General Principles, Rights and Responsibilities for achieving environmental protection and sustainable development. Its broad first principle of human rights was presented as follows:

All human beings have the fundamental right to an environment adequate for their health and well-being.

The importance of the environment as a human right is outlined not only by international bodies but also the right to a healthy environment is included in some national constitution. For example, the Bulgarian Constitution provides a right to a healthy and favourable environment. Article 55 of this constitution states that:

Citizens shall have the right to a healthy and favourable environment in accordance with the established standards and norms.

The above given information is prerequisite to say that clean environment is one of the fundamental human rights. Everyone has the right to demand environment that is adequate to their well-being. Since clean air is a major part of a clean environment, it can be said that air pollution threatens this basic human right – the right to a clean environment.

## Conclusion

Air pollution represents a major threat both to health and to the environment. Despite the adoption of numerous international, national and regional norms, air pollution still continues to be one of the major environmental issues of concern. The human rights to life, health, and a clean environment are powerful tools available for citizens to strengthen the enforcement of existing laws and regulations and combat air pollution. Despite the air quality regulations in Bulgaria, measurements show exceedance of the major air quality parameters such as PM<sub>10</sub>. The air pollution in Bulgaria which causes health related illnesses and premature death can be said that threatens basic human rights such as the right to life, health, and the environment.

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