

Pollution in Vietnam: the reasons and solutions

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Vietnam has an area of 331,690 km², located in the eastern part of Indochina peninsula, in Southeast Asia. Sharing the border with the three countries: China in the North, Laos and Cambodia in the West and the East Sea in the East. At present, Vietnam's population is more than 95 million, ranking 13th in the world with the main two city, Hanoi - the capital of Vietnam is the second largest city with 6.2 million people, after Ho Chi Minh City with 6.4 million people.

Vietnamese history started from 1,000 to 2,000 years BC. After the August Revolution in 1945, the Democratic Republic of Vietnam was born. The battle of Dien Bien Phu in 1954 marked the end of the French on the territory, and from July 2, 1976, officially named the Socialist Republic of Vietnam.

From 11 January 2007, Vietnam officially became the 150th member of the World Trade Organization. On October 16, 2007, at the voting held at the United Nations General Assembly in New York, Vietnam was officially elected as a non-permanent member of the United Nations Security Council for the 2008-2009 term and Vietnam will hold the position of Chairman of the Security Council in January 2020, soon after becoming a non-permanent commissioner of the council for the term 2020-2021.

Vietnam is a country with a diverse culture. Vietnamese language, the official language of Vietnam, the native language of over 90 million people, is also used by overseas Vietnamese in many other countries such as the United States, France, Australia and Cambodia...

Currently, the issue of environmental pollution in Vietnam is a hot topic in the newspapers and has received a lot of attention from the people because creating many troubles for the citizen. The planning of urban areas is not associated with the issue of waste treatment, waste water treatment, etc. This situation exists in big cities, industrial parks and urban areas,

causing environmental pollution at an alarming level. It is estimated that out of 183 industrial parks in the country, over 60% of industrial parks do not have a centralized wastewater treatment system. In urban areas, only about 60% - 70% of solid waste is collected, the infrastructure for drainage and treatment of wastewater and waste did not meet the requirements of environmental protection. Most of the wastewater is contaminated because of grease, chemicals, dyeing chemicals, etc., untreated and directly threw into the natural rivers and lakes by the enterprises, causing serious damage to the living environment.

The above mentioned pollution is due to many reasons that can be listed hereafter:

The first, human consciousness is quite poor

It is expressed by the serious indifference of the people. Many people think that the problems they cause are too small, not enough to harm the environment. Some people think that protecting the environment is the responsibility of the state and the authorities, while others consider that the environment has been polluted, nothing can be improved and the pollution of the environment does not affect his/herself much. These thoughts have greatly affected to the education and environmental protection duty of the next generations.

Besides, adults do not set the standards to educate children. According to observations, at the schools, parents take their children to school and they stop at the school gate for breakfast and after eating, instead of putting away the box of sticky rice and bread box in the trash, they throw it on anywhere they want although schools have many signs and slogans prohibiting littering in public. These adults' actions greatly affect the consciousness of the younger generation.

The second cause of environmental pollution is the irresponsibility of businesses.

Due to the goal of maximizing profits, many businesses have violated the exploitation process, contributing to significant environmental pollution. On the other hand, the wastewater treatment system in some industrial parks has not worked effectively, polluted waste water is continuously discharged into rivers and lakes, which pollute the natural water source. In addition, the government's bureaucracy and lack of strict management and environmental protection are also helping to destroy the environment.

The third reason is transportation

Increasing amount of traffic in Vietnam also contributes significantly to polluting the atmosphere. There are many vehicles on the road that are out of date, which consume more fuel and emit more toxic gases, but there are still no measures to overcome the situation. The population is growing, vehicle density is increasing rapidly over the years but the proportion of

roads invested cannot catch up. Daily traffic jams are the main cause of air pollution in big cities.

The fourth cause is due to the natural effects

The natural causes of pollution may be due to erosion or landslides of hills and mountains, riverside soils that are swept by the water together with mud, soil, sand, humus to rise negative affecting the environment.

The fifth is the limitations and shortcomings in environmental protection policies

According to statistics of the Ministry of Justice, there are currently about 300 legal documents on environmental protection to regulate the behavior of individuals, organizations, economic activities, technical processes, and procedures of using raw materials in production, etc. However, the document system is still incomplete, lacking in synchronization, lack of details, stability is not high, the status of new documents issued in the short time and then must be rewrite, therefore, limiting the effectiveness of individuals, economic organizations, etc. in regulating the behavior of the environment protection.

The legal powers of environmental protection organizations, especially those of the Environmental Police force, are not really strong enough, so they have limited the effectiveness of monitoring, detecting and preventing the violations of environmental protection. There are very few cases of causing environmental pollution to be criminally handled, other remedies such as: forced removal from polluted areas, closing the factories which created pollution are not implemented effectively.

The authorities at all levels have not been fully aware and paid attention to the environmental protection, leading to the losing management and irresponsibility in environmental monitoring and supervision. In addition, the propaganda and education on environmental protection in society is limited.

The above status of pollution in general and in Vietnam particular as well its reasons greatly affects human life on the ecosystem leading to the following consequences: (1) *Has a negative impact on the lungs.* Smoke and smoke pollutes the air, breathing in polluted air sources will burden the lungs, making the lungs more susceptible to damage. For people with asthma, breathing the polluted air makes the disease worse. According to some studies, children with high incidence of asthma live near highly polluted areas. (2) *Environmental pollution is also a cause of increased cancer risk.* Research by scientists in the world has shown that cancer

arising up to 75-80% of the cause is related to the environment. Research results show that, when polluting the soil environment, when the vegetables and food grown on the contaminated land will contain a portion of chemical toxins and when humans eat those foods, the amount of poison build up in the body and form cancerous masses. (3) *Unsafety Earth environment*: Environmental pollution has a huge impact on the ecosystem. Firstly, the contaminated soil becomes barren and unsuitable for crops. Plants grown on this soil will become infected, causing people to eat it. Secondly, the contaminated soil environment will infiltrate into the water, polluting the underground water source and lead to a shortage of water for domestic use or to use dirty water sources. Thirdly, the contaminated soil environment will narrow the habitats of many biological, animal and plant species. (4) *Bad air environment*: polluted air environment will also leave a lot of consequences such as: Firstly, causing acid rain reduces the pH of the soil. Secondly, air pollution creates a phenomenon of smog, which reduces sunlight, affects photosynthesis and growth of plants. Thirdly, air pollution is also the cause of the ozone layer, causing global warming, destroying ecological zones. (5) *Bad water environment*: It can be said that water pollution is the most serious problem in Vietnam today and it is destroying aquatic creatures. Specifically, water pollution caused by Formosa Vung Ang (Ha Tinh) discharged directly into the sea, causing mass fish deaths from Vung Ang (Ha Tinh) to stretch to Quang Binh, Quang Tri, Thua Thien- Hue in early April 2016 is the serious example.

Based on the above analysis, the author proposes some suggestions to decrease the pollution situation in Vietnam as the following:

People need to raise awareness about environmental protection, littering in the right place. There is a need for compulsory education to raise children's awareness about environmental protection. In addition, the use of chemicals should be restricted when dealing with clogged drains and using the vacuum machine instead.

The State needs to improve the legal system on environmental protection, including sanctions that must be really strong to deter detainees. In addition, it is necessary to synchronously build an environmental management system in factories and industrial parks according to international standards.

In tourist areas, densely populated areas, large roads, etc., there should be more trash bins with lids and public toilets. Most importantly, every cell in society must know how to **separate waste** from their own house to the public to be able to recycle and minimize waste to maximize the quality of the living environment for people.

Finally, to drastically propagandize and educate about the environment in the whole society to create a change and raise awareness of observing the law on environmental protection. Besides, using the new fuel source for motorbikes, cars and other means of transportation.

In short, the current environment pollution situation in Vietnam is at a serious warning level. However, it is still possible to save if everyone contributes, protects the environment and contributes to preserving a green - clean - beautiful environment.



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