



**Otázka:** Global and social problems

**Jazyk:** Angličtina

**Přidal(a):** Werczii

Civilization has brought many advantages but its products also pollute and damage the environment in which we live. Pollution affects air, water, land, forests, people, animals and plants.

### 1) **AIR POLLUTION**

Air pollution is the biggest problem in large cities and in areas with concentrated industrial production. Emissions range from smoke, dust, and smells to car and lorry exhaust. **Smoke** contains sulphur dioxide, nitrogen oxide and carbon dioxide which are produced by coal-fired power stations and industrial plants burning fossil fuels. Substances such as sulphur dioxide (SO<sub>2</sub>) and nitrogen oxide (NO) can cause major changes in the environment which can lead to climate changes. These substances mix with water vapour in the atmosphere and form sulphuric acid and nitric acid. Sunlight turns these acids into poisonous oxidants which fall in the form of rain (**acid rain**) or snow onto trees and gradually kill them.

Trees are vitally important for our life because they are the lungs of our planet. They absorb carbon dioxide from the air and give out oxygen in return. Trees are not threatened by pollution, but by people. The great **rain forests** are being destroyed for firewood and building materials. If we lose tropical forests, it will become more difficult, perhaps even impossible, to breathe. With more carbon dioxide in the air, the temperature will rise; the icecaps at the North and South Poles will melt, and the sea level will rise which result in the flooding of many coastal cities.

Greenhouse effect is causation of global warming. Without these “**greenhouse effect**” there could be no life on earth because earth is warmed up naturally by the atmosphere which traps solar radiation. But manmade atmospheric emissions, such as carbon dioxide (produced by

burning fossil fuels), nitrogen oxides (from car exhaust), CFCs (chlorofluorocarbons from aerosol and refrigerators), methane (a byproduct of agriculture /generated by decaying refuse and livestock/ from rice, cattle and sheep) and water vapour prevent the heat from escaping (have formed a blanket around the Earth. This blanket prevents the heat from escaping). The result is a rise in the Earth's temperature, the melting of arctic ice and the flooding of areas situated near sea level.

**Ozone** is another air pollutant that contributes to the „greenhouse effect” at lower atmospheric levels. Ozone (special type of oxygen) is around the world and is produced naturally from oxygen. Ozone hole is problem. **Ozone layer** is layer in the atmosphere where the problem is located. Ozone stops ultraviolet radiation from the sun. Ultraviolet radiation is responsible for sunburn, eye damage, skin cancer and the ageing and wrinkling of skin. The ability of the body's immune system to cope with infections might be impaired. Many aerosols, sprays and factories destroy ozone and they have made a very big hole in the ozone layer. This means that too much UV enters the Earth.

How can the problems of air pollution **be solved**? First of all, people should try to use **alternative sources of energy**, such as *solar, water, wind, geothermal* and perhaps *tidal energies*, or at least to burn *smokeless fuels*.

There are more ways to reduce air pollution caused by road traffic. First it is possible to switch freight from road to railways and to support public transportation. Also, people should be encouraged to drive at the speed limit in order to use fuel more efficiently. Another way is to encourage tree planting, because trees absorb carbon dioxide. Then all new petrol-driven cars will have to be fitted with three-way **catalytic converters**. Lead emissions can fall if we reduce lead content in petrol and encourage the use of **unleaded petrol**.

## 2) **WATER POLLUTION**

Water pollution results from *harmful industrial processes and households*, from *pesticides* and other chemicals (e.g. fertilizers) *used in agriculture*, from *waste disposal sites*, *substandard sewage treatment plants* and from *ships*. Concentrations of *heavy metals*, such as mercury, cadmium, lead, or copper are increasing. *Nitrate* can pollute inland waters by leaching from farmland.

If we want to have cleaner waterways, some **measures** must be taken. First, discharges to

water from industrial processes should be controlled and the number of sewage treatment plants should be increased. We should also find technologies for saving water and reduce the amount of chemicals. New technologies should develop environmentally friendly pesticides. To prevent nitrate leaching into water, farmers can change their farming practices, for example by *growing "green cover" crops* in the autumn to take up residual nitrogen. International agreements control oil discharges and dumping of land-generated wastes. Oil and chemical spills from ships at the sea (are dealt with by chemical dispersants spread onto it from specially equipped aircraft).

**Oil wells** on land or rigs are built at the sea. Pipelines bring the oil to terminals and there oil is moved by ship to the refineries where it is cleaned and made into a product that we use. *Refineries/oil terminals* take up large areas of land – natural vegetation and wildlife are destroyed. Refineries/oil terminals are kinds of eyesores (don't look very good). Oil can spill into the sea. A *slick* can also kill wildlife and pollute beaches.

### 3) **LAND POLLUTION**

**Soil** can become contaminated as a result of municipal and industrial waste and other causes. Much domestic rubbish is disposed of in **landfills**. Before waste is landfilled it can be shredded or compressed into bales. But many cases landfill can be avoided by **re-using, recycling** or **energy recovery** from the waste material. Not only bottle bins or containers, but also can containers, plastic containers and paper containers should be installed where the public can deposit used glass containers, cans, plastic and waste paper for recycling. Domestic rubbish should be sorted out too. Kitchen garbage and garden waste of organic origin can be composed and turned into fertilizer. Litter, dust and rubbish in the streets also threaten the environment. Everybody knows that it is wrong to litter but many people still do it.

### 4) **NOISE, ANIMALS, GREEN BELTS**

**Noise** is a problem for many people. It results in stress, lack of concentration, defective hearing or sleeplessness.

**Animal and plant protection** - Some animals are protected (bats, badgers), others (otters, some species of birds, such as owls) are bred in captivity for release in the wild so they have the best chance of survival. The establishment of National Parks, Nature reserves provide

protection.

**Green belts** have been established around major cities in Britain (London, Edinburgh, Glasgow, and Manchester) to provide some place for recreation.

## 5) TERRORISM

Terrorism is a word that the most people in the world are familiar with. We all have ideas about terrorism, but we rarely realize how difficult it can be to determine the criteria to define what terrorism actually is.

### CRITERIA FOR TERRORISM

**Purpose:** It seems that the general purpose of terrorism is to stimulate some kind of change from a particular government. Most of the historical and modern terrorist organizations have specific political goals that they are trying to achieve. In some cases, these goals can be as simple as one or two changes wanted from the government (e.g. leaders to resign,...), in many cases, though, the main political goal of a terrorist organization is to separate a land or region from the country that governs them (such as ETA fighting for separation of the Basque region from Spain) or remove the system of government in a country altogether. Sometimes it can be religion or something as simple as a large amount of money.

**Violence and fear:** Terrorist organizations are famous for their bombings and killing; this is a big reason why Gandhi cannot be considered a terrorist, because he is famous for his insistence on non-violent protest. Fear is a very important aspect of terrorism; it is the strongest tool a terrorist has (because it keeps people afraid that the bad things that have happened in the past will happen again, unless the terrorist get what they want).

**Targets:** Civilians, everyday people, are who terrorists use as the subject of their terror in order to try to coerce politically important people.

### FAMOUS TERRORIST ORGANIZATIONS AND TERRORISTS

**Al-Qaeda** is famous for their September 11, 2001 attacks on the World Trade Center in the US.



Osama Bin Laden is the well-known leader of Al-Qaeda.

### **Hezbollah**

### **Hamas**

**IRA** (Irish Republican Army): It is a left-wing, paramilitary organization striving for the independence of Northern Ireland. They are responsible for deaths during what was called "Troubles".

**KKK:** The KKK (Ku Klux Klan) is a white supremacist organization based especially the South-East of the United States.