

# The Contradiction Between the Environment Created by Man and the Natural Environment in the Context of Globalization

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## Abstract

*In the last decades, as a result of the use of results of the development factors of productions, the premises of a serious ecological imbalance have accumulated at an extremely rapid pace. Since the natural environment has been unable to absorb the shocks from human intervention, ecological crisis broke out.*

*The paper aims to surprise a symbiosis between man and nature, based on the aggravation of environmental problems and growth of global population. It is obvious that the satisfaction of unlimited human needs has been done through the accessing the planet's resources, whose regeneration rate is far inferior to the intensity with which needs multiply.*

*The basis of this paper is analyzing some of the factors involved in the degradation of the environment, in the context of globalization, mankind has to realize that the health of the planet is most important for the existence of current generations and the ones to come.*

**Key words:** environmental crisis, sustainable development, sustainability, ecological imbalance

**J.E.L. classification:** F64

## 1. Introduction

Over the years, globalization added new meanings, reaching, currently, to capture the whole economic life, influencing it from all points of view. With it new elements have arisen, but not without dangers and uncertainty, globalization leaving room for restlessness, getting harder to hide in connection with the collateral effects it could cause.

For some authors globalization is something that needs to be achieved in order for us to be happy; others say that the source of our unhappiness is globalization itself. Though, it is safe to say that for all of us globalization is a mandatory stage towards which mankind is heading very fast, an irreversible process that affects all of us equally and in the same way.

Globalization can be explained in different ways, but based on the aggravation of environmental problems, it represents a long-term system of approach to major contemporary problems, determined by the interaction of multiple political, economic, technical, ecological, social, cultural, religious processes and phenomena and the hope of solving them by the international community.

## 2. Environmental crisis

In the last decades, as the bonds between the world's states became stronger, globalization has determined an aggravation of global problems, including environmental crisis.

The ecological crisis is the expression of the contradiction between man made environment and his natural environment, between man and nature. Along history, man has considered that the planet's resources are an unlimited gift from nature, excessively exploiting them, without thinking of the disturbances that might occur in the ecosphere. Technical progress has had a major influence

over the amount of exploitation over natural environment. The way in which the technique was used had a contribution over environmental degradation.

Mankind has known other moments of ecological crisis. Although, the causes were of natural order: epidemics, natural cataclysms, etc. Over the last few years, economic, social and political causes have become primordial.

However, we cannot say for sure that mankind is on the verge of collapse, that the triggering factors of the ecological crisis would have escaped out of man's control. The danger is however real, making immediate action necessary, not only on a national scale, but international as well. People and local authorities, national and international have to collaborate in order to decrease, as much as possible, the negative ecological effects.

The ecological crisis from the past years has two major forms of manifestation: resource crisis and pollution.

Resource crisis has been generated by the irrational exploitation of resources. As the human society evolved, the needs of the population that were growing, have intensified and the planet's resources have decreased thoroughly. Even those that regenerate, have a much inferior regeneration rate to the intensification and diversification of human needs.

The planet is faced with the biggest population growth in the history of mankind. At the moment, the world's population has overcome 7,5 billion inhabitants.

It is estimated that the world's population will increase in the next decades up to 9 billion humans and will peak at 10 billion in 2050.

Over two billion people we will live on the planet over the next decades, they will need food, water and shelter, in the conditions of climate change that underline these fundamental human needs, these mean severe problems for the world's states. It is obvious that this rising population growth does not come with the same growth in resources as well.

Billions of people will be confronted with the lack of water, hunger, overpopulated urban areas in which living is nearly impossible, drought, food shortage, urban misery, migration and resources that are close to epuization, while the ability to meet needs tries to keep pace with the demand.

*Pollution*, in its diverse forms, is a result of uncontrolled economical development. It consists of affecting the natural ecological balance of an ecosystem, under the pressure of toxic substances made mostly by human activity. Overcoming a certain step, pollution damages the state of comfort of the human, his health, does damage to the economy, might become a calamity for whole regions.

It is estimated that the deterioration of the environment through pollution was caused by the way the industry has developed in the last hundred years, namely energy-intensive industries and a chaotic urbanization.

In the developed countries, the pollution phenomena has a rather small scale. Generally, in these countries poverty itself is a cause of pollution. It is safe to say, that over the last hundred years many of the developed countries have registered economical growth rates that can be compared to the advanced states, relying on attracting foreign investments, mainly industrialists from developed countries.

Other factors that are involved in the degradation of the environment are: some agrotechnical methods that are wrongly used, transports, urbanization, tourism, armaments race.

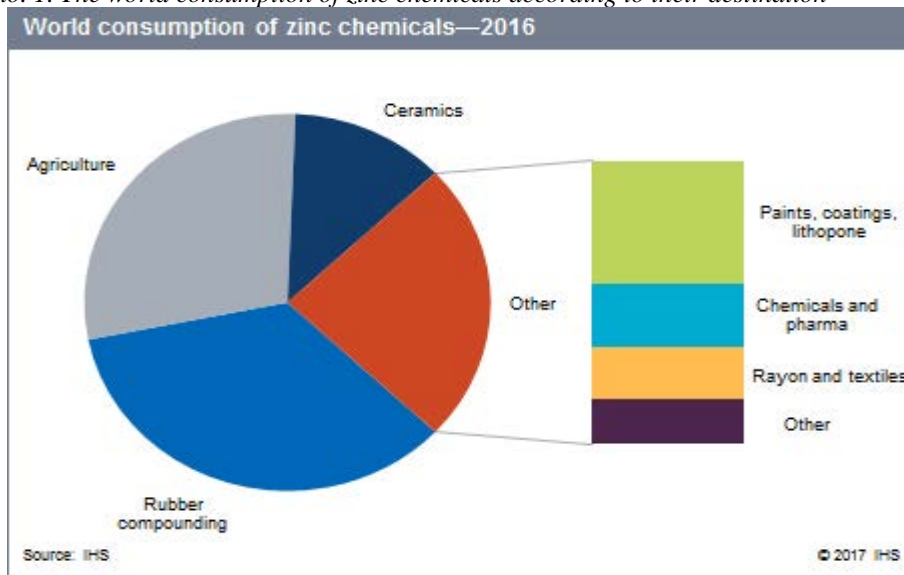
*Chemistry of agriculture* leads to high increase in production, but used scientifically, by omitting ecological aspects, might damage the soil, water, plants and man itself, from the food he eats.

For example, chemical products of zinc, respectively zinc oxide (62%), zinc sulphide (33%) and zinc chloride (5%) are increasingly more present in agriculture, rubber and ceramics industry.

Zinc chemicals continue to record growth in fertilizer industry, animal food and food consumption. Because above 50% of the world's soils are considered to be deficient in zinc, and the global population has doubled in the last decades, it's obvious that the arable land per person has decreased, but the crops need to grow to provide food for the growing population. In numerous studies, made including China, India, Brazil and Turkey, agricultural production has grown by adding zinc to the fertilizers and standard premixes.

The following graph shows the world consumption of zinc chemicals according to their destination:

Figure no. 1. The world consumption of zinc chemicals according to their destination



Source: <https://www.ihs.com/products/inorganic-zinc-chemical-economics-handbook.html>  
[Accessed 12 November 2017]

Some branches of the industry like petrochemistry, steel industry, cement production are becoming pollution factors when there are no measures taken to prevent it from happening.

Industrial consumption of fossil fuel for energy production, different gases and dust that are coming out from the chimneys of the factories have attracted the attention of ecologists a long while ago. The concentration of carbon dioxide in the atmosphere is rising, some say with 2% annually, rising the temperature in the lower layers of it, generating the greenhouse effect. The intensification of this process might modify the rainfall regime, climate, etc.

This is becoming a reality of the 21st century, if we keep in mind the evolution of economies from countries like China, India, Brazil, South-East Asia or East Europe and the fact that USA has not yet approved the Kyoto Protocol.

The human in industrial environment, is becoming increasingly exposed to metallic pollutants that are spreading in the air and water: copper, mercury, lead, chromium, cobalt, nickel.

The spills of some industries, especially chemical, in the waters attract great calamities. Also, it is worrisome the fact that more radioactive waste are spilled in the ocean.

Transports, in their various forms might become pollution sources: air pollution (through the exhaust gases), noise pollution (from the high noise of engines). Oil tanker accidents, accompanied by black tides, trigger real ecological catastrophes.

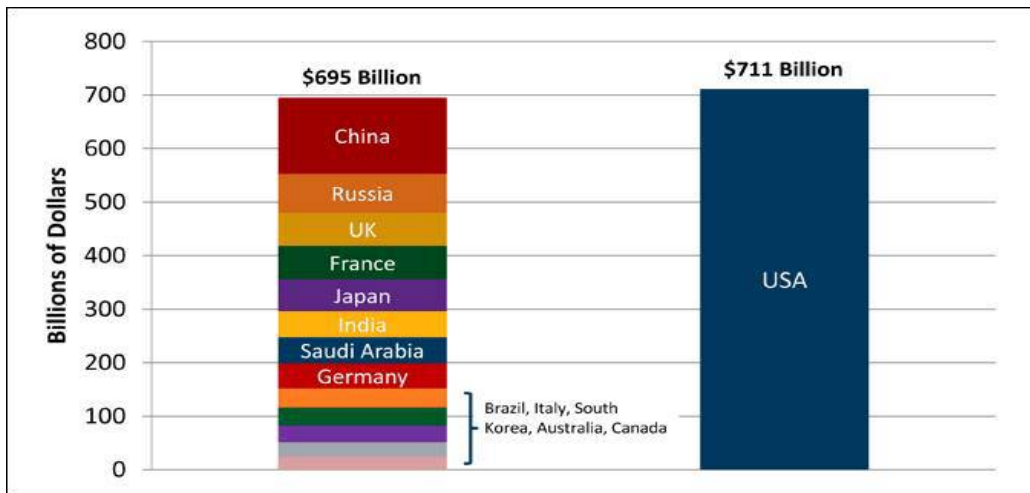
In the big cities, urban transport and industrial activity are at the root of smog, a phenomenon that, in some cases it's so intense that prevents sunlight from entering the atmosphere, attacks sight and breathing.

Gas emissions in the transport sector (14% of global gas emissions that have greenhouse effect), mainly involve fossil fuels fired for road, rail, air and maritime transport. Almost all (95%) of the world's transport energy comes from oil-based fuels, mostly gasoline and diesel.

The industry has been considered, for decades, as the main source of pollution of the planet. The accelerated development of transport, especially the growth in motor vehicle production, have made transport a major source of toxic substances and aggression towards the environment and human health.

A particular pollution factor is *the arms race*. In addition to it requiring enormous quantities of raw materials, accelerating their exhaustion process, military action itself, as well as experimenting with chemical and nuclear weapons that disturb the ecological balance of our planet.

Figure no. 2. World's states arming expenses



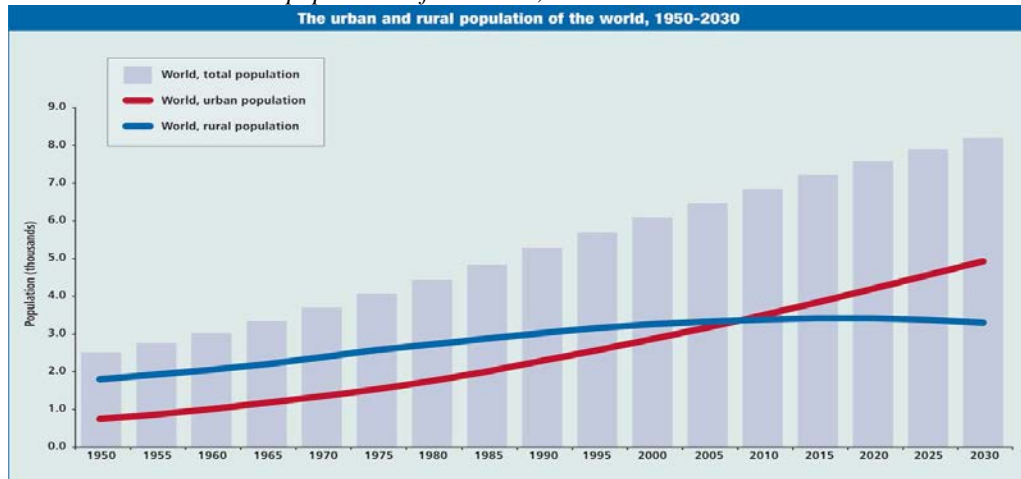
Source: <http://russia-insider.com/en/russia-and-china-will-win-new-arms-race/ri13258>  
[Accessed 23 July 2017]

It is obvious that world states, mainly the economic powers of the present century are investing billions of dollars in arming themselves, to support their position in the economic field. Countries like the US, China, Russia, the UK and France are investing huge amounts in arming themselves, representing a true paradox, as they are permanent members of the UN Security Council.

#### Urbanization

In the twentieth century, as well as the beginning of the 21<sup>st</sup> century, there was a rapid urbanization of the world's population. The global proportion of urban population has grown from 13% in 1900 to 29% in 1950 and reached 49% in 2005.

Figure no. 3 The urban and rural population of the world, 1950-2030



Source: <http://www.un.org/esa/population/publications/WUP2005/2005wup.htm>  
[Accessed 13 November 2017]

As the world is in a continuous urbanization process, it is expected that over 60% of the global population will live in cities by the end of 2030. Urban population increased from 220 million in 1900 to 732 million in 1950 and reached 3,2 billion in 2005. According to the United Nations forecast, in 2030, 4,9 billion will live in cities.

Already, according to the latest World Bank data, urban population represented in 2015, 54.2% of the world population.

### 3. Conclusions

The planet's balance problem is of general interest. Mankind is not in a situation without exit. The contradiction between human and nature, between demands of economic and social development and the imperative of environmental conservation can be resolved by current technical possibilities. Natural limits are not in the way of growth, the true limits are social and political.

According to the United Nations, despite the progress made in the last years by an increasing number of countries regarding the balance between growth and environment, we would require concrete approaches to contribute to true sustainable development.

UN Under-secretary general, Wu Hongbo stated in April 2017 that in order to achieve this vision, all stakeholders must actively seek equitable, balanced and sustainable ways to address the economic, social and environmental needs of present and future generations.

The wellbeing of each member of the human community depends on the planet's health as a whole.

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