

AN OVERVIEW OF THE LONG-TERM IMPACTS OF GLOBAL WARMING ON HUMANITY

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Abstract

A novelty of our time is that humanity faces a global phenomenon whose consequences are still hard to assess by scientists, this phenomenon is global warming. Some people still doubt its existence however not only is it a real event but it is much more complex and urgent than it is considered to be. In the following reference we will evaluate if the phenomenon is favourable, dangerous or neutral for the global ecosystem. The idea of saving the planet may seem utopian, but it is necessary to think about the need to maintain a stable and beneficial climate in order to have an ideal habitat for human beings for as long as possible.

In this reference we also intend to describe the "fight" between those involved in climate campaigns versus climate skeptics / industrial groups. The ultimate goal would be to influence the audience and implicit, on climate policy making.

Key words: *climate, deforestation, global warming, pesticides.*

INTRODUCTION

In the last twenty years, all the developed countries of the world have accepted the fact that they are facing numerous challenges of prime importance. More specifically, the rise of the energy consumption, which is a challenge of utmost importance, is believed to be a result of not only the increasing population but also of the extravagant needs that come along with it, reported to the current state of economic and social development, which is correlated with the increased resource exploitation and leads to global warming, a direct and often uncontrolled consequence (Vac, 2012). These challenges are closely interdependent and we have to deal with them accordingly.

MATERIALS AND METHODS

This work is a study of published literature data using search engines where we found that are so many factors that increase the global warming impacts on humanity and we discuss about this in the next section.

RESULTS AND DISCUSSIONS

Causes, Effects and Measures

Not only the necessity for economic growth in highly developed countries such as USA, Japan, Germany, France, but also in emerging countries such as India, China, Brazil, South Africa, Central and Eastern Europe, leads to massive deforestation. This actions result in the reduction of the forest vegetation on a certain surface, without being followed by its regeneration. It also leads to soil pollution with pesticides that causes increased toxicity among cereals, vegetables and fruits.

Considering these particularly important and alarming aspects, the word started looking for solutions and those identified so far are: recycling, energy and heat saving and thermal insulation of houses.

The effects of using fertilisers and pesticides

The use of chemicals for agriculture through fertilisers, herbicides, pesticides, plant hormones is closely related to both increased production and environmental issues. In order to increase the productivity of the soil people

used to practice an extensive agriculture, then they introduced irrigation (Mesopotamia, Egypt), later on they start to treat the soil with natural fertilisers, so that now to use chemical fertilisers based on nitrogen, phosphorus, potassium and anti pests. In the last half century, the use of fertilisers based on nitrogen has increased exponentially (Amza, 2011). The problem is that the oxides of nitrogen have the ability to retain up to 300 times more heat per unit volume than carbon dioxide. It has been found that the intensive use of fertilisers with nitrogen, phosphorus and potassium leads to increased soil content in some elements such as: Zn, Pb, Ni, Cr, elements that were previously found only in traces and in soluble forms.

The pollution of food with nitrate produces anaemia especially to children and young animals and also favours the synthesis of cancerous compounds which is a big disadvantage. These compounds are being found mainly in fruits and vegetables such as carrots, spinach or cauliflower, etc. When the oxidising processes are taking place, the reducing denitrification processes are being intensified which leads to soil erosion. Moreover occurs the soil structure damage and the gradual reduction of fertility by reducing the percentage of humus.

Agriculture is in a way an intervention against nature and when it is practiced unreasonably it leads to the decrease of fertility, the change of biocenosis and finally the change of the ecosystem.

On the one hand agriculture has a positive role as it purifies atmosphere. The green plants inhale CO₂ from the atmosphere and exhale O₂. On the other hand we are dealing with the industrial objectives which contaminates the atmosphere with SO₂, Na, NO₂, cement powders and affect agriculture.

Regarding the fact that a lot of pesticides cannot be biologically degraded we have some serious impacts on the human beings. Pesticides are being accumulated in the liver and in the adipose tissue and they can cause serious poisoning and massive weight loss, up to 20-30 Kg/3-4 months (Ciobotaru et al., 2011).

The effects of deforestation

Deforestation rate is high, especially in the tropics. There the poor quality of the soil has led to deforestation in order to make available new lands for agriculture. Irrational deforestation creates crucial imbalances in nature. Some of them are the change of precipitation regime (drought), the change of the movement of air currents, degradation and erosion of the soil, the appearance of floods, the loss of biodiversity due to the extinction of some species of plants and animals and the greenhouse effect which is determined by the increment of the amount of carbon dioxide in the atmosphere (Dumitru, 2005). Several countries have initiated afforestation or reforestation projects to combat the effects of deforestation and to increase the amount of wood available.

Every minute, 26 hectares of forest are being lost and if the process continues at the same pace, Terra will become a planet without forests (Paraschiv, 2016). This would be an ecological catastrophe because forests are the natural habitat of many species of plants, animals and birds. It is also the most effective natural organizer because it adjusts the water circuit in nature by decreasing the intensity of the evacuation of the water in soil. Moreover forests are important because they diminish the intensity of strong winds, they prevent the flow of water from peaks and they adjust the content of carbon dioxide and oxygen from the atmosphere. Last but not least, every single forest from our planet retains a huge amount of dust and atmospheric impurities (Roşulescu, 2016).

The effects of irrational waste management

The problem of the waste is a global problem, not only from the perspective of the impact towards the environment and the human population's health and also towards resource depletion. Waste management can contain hazardous substances with a highly environmental and human health risk but at the same time it is also possible to provide secondary resources, material resources and

energy resources which can be recycled (EEA, 2013).

On the European level it is required to have a standard adoption towards managing the impact on the environment and for the durable usage of the resources, the main methods are: the prevention and the minimization of the quantity of waste, recycling (material or energetic), the incineration (with energy recovery) and the depositing (in controlled deposits).

The integrated waste management approach involves the evaluation of the impact that the manufacture of products for consumption has on the environment (which is the growth due to the high population density, but also because of the comfort that today's society demands), until their disposal in the form of waste management („from cradle to grave”).

CONCLUSIONS

The effects of global warming may be diminished by planting trees. Trees are providing a vast amount of O₂, they also absorb CO₂ which helps to achieve photosynthesis; furthermore it helps to keep the soil, in this case we prevent landslides. Tree roots filter the water from precipitation, by pouring it into the layers of muscle and dead leaves, providing purified water.

Along with deforestation, thrown pesticides in agriculture and avoiding the use of traditional crops for the healthy growth and also the pollution from waste we prevent the correct operation and the natural cycle of life, after that it will occur natural events that will destroy everything that was created/born until the present day=“Global Warming”.

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