

Impact of Climate Change on Agriculture and Forest

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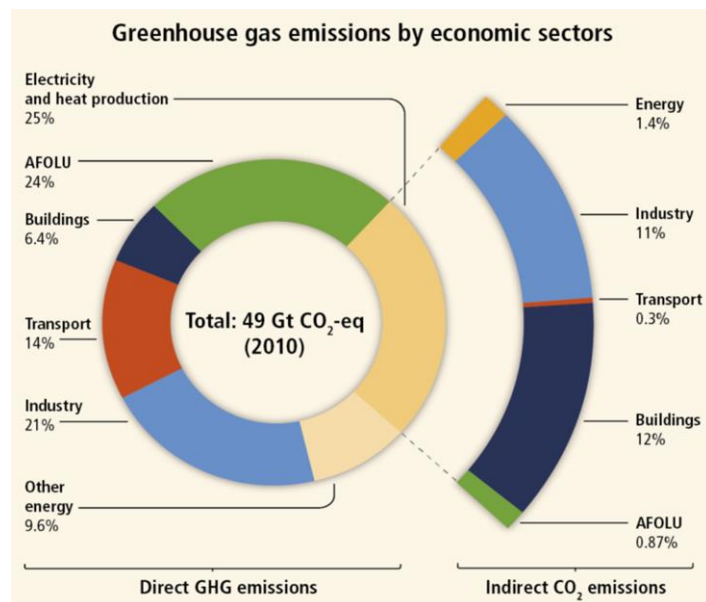
Available online at
www.sunshineagriculture.vitalbiotech.org

Article History
Received: 15. 01.2023
Revised: 17. 01. 2023
Accepted: 24. 01. 2023

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INTRODUCTION

Agriculture is a major source of Greenhouse Gases which contribute to the greenhouse effect and climate change. According to the International Panel of Climate Change (IPCC, 2013) agriculture, forestry and the change of land-use, account for as much as 25% of human induced GHG emissions. Agriculture is one of the main sources of emitted methane and nitrous oxide.



International Panel of Climate Change (IPCC, 2013)

Pollution ?

Pollution introduces us to the world of hazardous products. These hazardous materials are called Pollutants. Pollutants, such as volcanic ash, may be normal. Human activity such as garbage or runoff created by factories may also generate them. The quality of air, water and land are impaired by contaminants.

Environmental Pollution

Environmental pollution occurs when in due course of time, the environment is unable to absorb and neutralize toxic by products of human activities (poisonous gas emissions).

Air Pollution ?

Air pollution is a blend of airborne solid particles and gases. Car pollutants, factory chemicals, dust, pollen and mold spores may be suspended in the form of particles. In cities, ozone, a gas, is a big part of air pollution. It's also called smog as ozone creates air pollution. Sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone, volatile organic compounds and airborne particles are some of the most notable air pollutants. Radioactive emissions are among the most harmful air pollutants, specifically when produced by nuclear explosions.

Effects of Air Pollution

An increased risk of heart disease, wheezing, coughing, and respiratory problems and skin, nose, and throat irritation can be caused by high levels of air pollution. Air Pollution affects human health in different ways, Air pollution may also cause heart attacks, asthma, and other respiratory complications. Like humans, animals can also suffer from a variety of health problems because of air pollution, including birth defects, reproductive failure and diseases.

Besides the impact on humans and livestock, air pollution causes a variety of environmental effects. Acid rain includes high levels of nitric and sulfuric acids that are formed by the burning of fossil fuels by the oxides and sulfur oxides released into the air. Acid rain kills trees and acidifies soils and bodies of water, making survival difficult for fishes and other marine organisms.

Through burning fossil fuels, nitrogen oxides emitted into the air also add to the nitrogen responsible for blooms of toxic algae. The ozone layer is depleted by the release of man-made chemicals including hydro chlorofluoro carbons, chlorofluorocarbons and halons, which were historically used as coolants,

foaming agents, pesticides, solvents, aerosol propellants and fire extinguishers.

Water Pollution ?

Water pollution includes insecticides and herbicides, waste from food production, animal wastes, organic volatile compounds, heavy metals, chemical waste, etc. Water contamination happens when a stream, river, lake, ocean, aquifer, etc. is polluted by harmful substances, often chemicals or microorganisms, degrading the quality of water and making it poisonous to humans or the ecosystem.

Effects of Water Pollution

The consequences of water pollution depend on where contaminants are dumped. Water pollution is a significant danger to humans, animals and marine life. Water sources near urbanized areas tend to be highly contaminated by the legal and illegal dumping of waste and chemicals by industrial facilities, health centres and individuals.

The death of marine animals, which can destroy the whole food chain, is by far the greatest consequence of water contamination. In drinking water supplies, fertilizer contamination can cause toxic algae blooms that destroy fish and other aquatic animals. Direct exposure to this poisonous algae causes significant human health issues, including neurological symptoms, breathing problems and stomach and liver diseases.

When disinfectants used to treat drinking water enter water contaminated with toxic algae and respond to the production of dioxins, a consequential problem is developed.

Land and Soil Pollution ?

Fossil fuels (oil, gas, coal) have transcended virtually all conceivable barriers in modern industrialized societies and established themselves in our daily lives. We use fossil fuels for our obvious daily needs (such as fueling a vehicle). These are also used in the power generation industry (specific oil) in goods such as all kinds of plastics, solvents, detergents, asphalt, lubricating oils and a wide range of industrial chemicals.

Effects of Land and Soil Pollution

For humans, plants, microorganisms and marine life, land and soil contamination have significant implications. Different skin problems, respiratory problems and even various types of cancers may result from polluted land and soil.

These poisonous substances come into direct contact with the human body by eating fruits and vegetables grown in polluted soils, direct contact with the skin and breathing in air polluted by particles and dust.

When it comes to land loss and soil erosion, deforestation is the greatest problem. Cutting of trees and tree cover produces harsh conditions that destroy forests and ecosystems. In atmospheric situations, deforestation often produces an imbalance, decreasing the amount of pollution is naturally taken out of the atmosphere. This is a significant problem

given that the majority of people's emissions are focused on biomass.

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