Rainbowdun's GREEN PROJECT

Let's talk about

ENVIRONMENTAL ISSUES & BIODIVERSITY

THE GREEN PROJECT 2023

Document Issued by Rainbowdun Foundation

INTRODUCTION

Environmental issues are the harmful effects of human activities on the environment. These include pollution, overpopulation, waste disposal, climate change, global warming, the greenhouse effect, etc.

Environmental issues are disruptions in the usual function of ecosystems.Further, these issues can be caused by humans (human impact on the environment) or they can be natural. These issues are considered serious when the ecosystem cannot recover in the present situation, and catastrophic if the ecosystem is projected to certainly collapse.

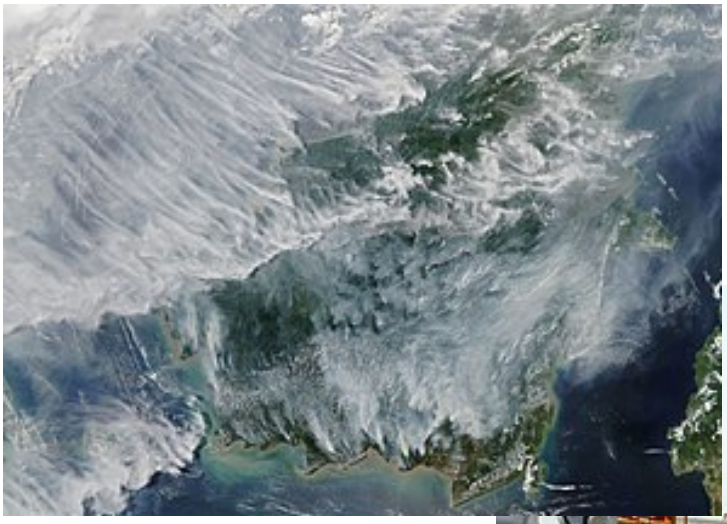
Environmental protection is the practice of protecting the natural environment on the individual, organizational or governmental levels, for the benefit of both the environment and humans. Environmentalism is a social and environmental movement that addresses environmental issues through advocacy, legislation education, and activism.

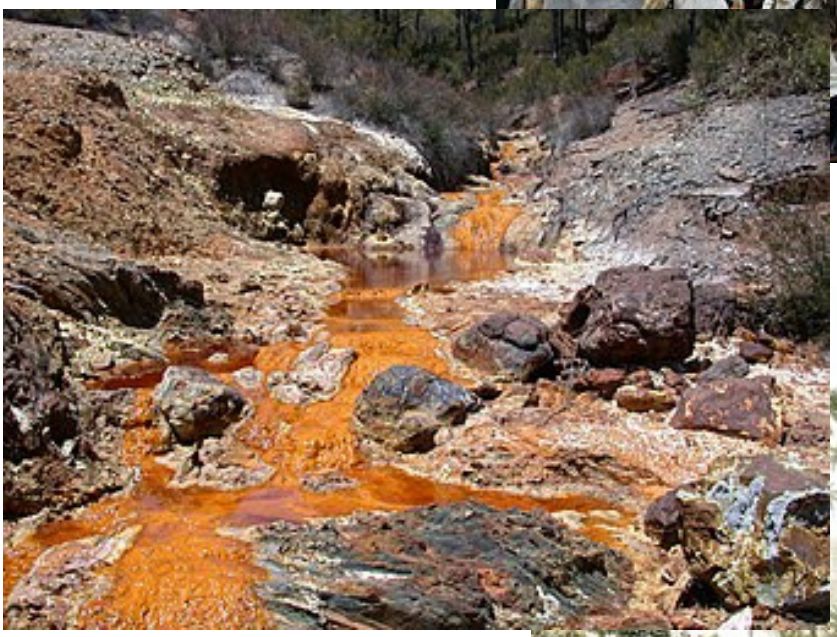
TYPES OF ENVIRONMENTAL ISSUES

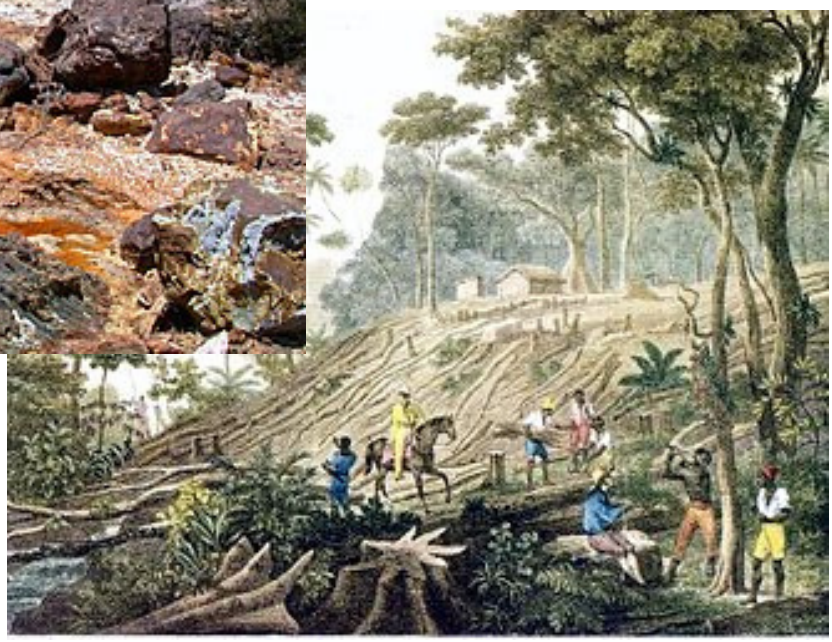
Major current environmental issues may include climate change, pollution, environmental degradation, and resource depletion. The conservation movement lobbies for protection of endangered species and protection of any ecologically valuable |natural areas], genetically modified foods and global warming. The UN system has adopted international frameworks for environmental issues in three key issues, which has been encoded as the "triple planetary crises": climate change, pollution, and biodiversity loss.

HUMAN IMPACT

Human impact on the environment (or anthropogenic environmental impact) refers to changes to biophysical environments and to ecosystems, biodiversity, and natural resources caused directly or indirectly by humans. Modifying the environment to fit the needs of society (as in the built environment) is causing severe effects including global warming, environmental degradation (such as ocean acidification, mass extinction and biodiversity loss, ecological crisis, and ecological collapse. Some human activities that cause damage (either directly or indirectly) to the environment on a global scale include population growth, neoliberal economic policies and rapid economic growth, overconsumption, overexploitation, pollution, and deforestation. Some of the problems, including global warming and biodiversity loss, have been proposed as representing catastrophic risks to the survival of the human species.







Top-left: Satellite image of Southeast Asian haze.
Top-right: IAEA experts investigate the Fukushima
Bottom-left: Acid mine drainage in the Rio Tinto.
Bottom-right: depiction of deforestation of Brazil's Atlantic forest by Portuguese settlers, c. 1820-25.

ENVIRONMENTAL PROBLEMS THAT OUR WORLD IS FACING TODAY

Our environment is constantly changing, and we cannot deny that fact. However, as it transforms, so does the need to become increasingly aware of the problems that surround it.

With a massive influx of natural disasters, warming and cooling periods, different weather patterns, and much more, people need to be aware of the environmental problems our planet faces today.

Global warming has become an undisputed fact about our current livelihoods; our planet is warming up, and we are definitely part of the problem.

POLLUTION

Pollution of air, water, and soil requires millions of years to recoup. Industry and motor vehicle exhaust are the number one pollutants. Heavy metals, nitrates, and plastic are toxins responsible for pollution.

Air, water, soil, noise, radioactive, light, and thermal. These are the primary causes that affect our environment; they are interlinked and influence each other. Therefore we need to tackle all of them together.

Oil spills, acid rain, and urban runoff cause water pollution, while air pollution is caused by various gases and toxins released by industries and factories and the combustion of fossil fuels; soil pollution is majorly caused by industrial waste that deprives the soil of essential nutrients.

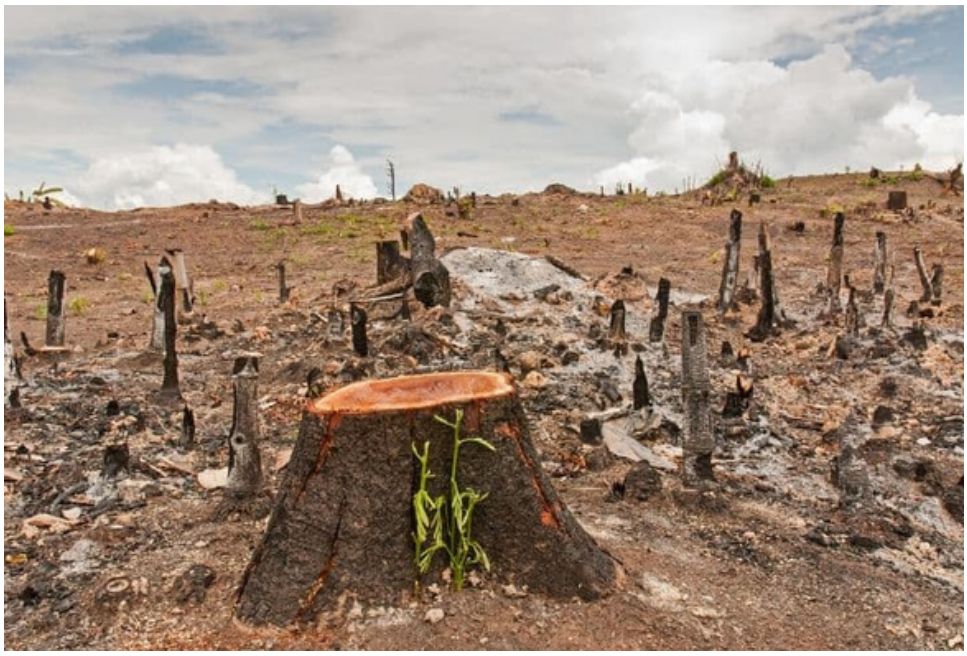
SOIL DEGRADATION

Globally, food security depends on the factor of whether or not soils are in good condition to produce crops.

According to UN estimates, about 12 million hectares of farmland yearly get seriously degraded, Soils get damaged due to reasons such as erosion, overgrazing, overexposure to pollutants, monoculture planting, soil compaction, land-use conversion, and many more.

Nowadays, a wide range of soil conservation and restoration techniques exist, from no-till agriculture to crop rotation to water retention through terrace-building.

DEFORESTATION



Our forests are natural sinks of carbon dioxide, produce fresh oxygen, and help regulate temperature and rainfall. At present, forests cover 30% of the land, but every year tree cover is lost, amounting to the country of Panama due to the growing population demand for more food, shelter, and cloth.

Deforestation means clearing green cover and ensuring land is available for residential, industrial, or commercial purposes.

POLAR ICE CAPS

The issue of the melting of polar ice caps is a contentious one. Although NASA studies have shown that the amount of ice in Antarctica is increasing, this is only one-third of what is being lost in the Arctic.

There is enough evidence that shows sea levels are rising, and the melting of Arctic ice caps is a major contributor. Over time, the melting of polar ice caps could lead to extensive flooding, contamination of drinking water, and major changes in ecosystems.

LOSS OF BIODIVERSITY

Human activity leads to the extinction of species and habitats and biodiversity loss. Ecosystems, which took so many years to perfect, are in danger when any species' population is decimated.

The balance of natural processes like pollination and human activities is crucial to the survival of the ecosystem. Another example is the destruction of coral reefs in various oceans, supporting rich marine life.

OZONE LAYER DEPLETION

The ozone layer is an invisible layer of protection around the planet that protects us from the sun's harmful rays.

The depletion of the crucial Ozone layer of the atmosphere is attributed to pollution caused by Chlorine and Bromide found in Chloro-fluoro carbons (CFCs). Once these toxic gases reach the upper atmosphere, they create a hole in the ozone layer, the biggest of which is above the Antarctic.

CFCs are banned in many industries and consumer products. The ozone layer is valuable because it prevents harmful UV radiation from reaching the Earth. This is one of the most important current environmental problems.

WATER POLLUTION

Clean drinking water is becoming a rare commodity and an economic and political issue as the human population fights for this resource.

One of the options suggested is using the process of desalinization. Industrial development is filling our rivers, seas, and oceans with toxic pollutants, which are a major threat to human health.

OVERFISHING

Overfishing affects natural ecosystems severely and leads to an imbalance of ocean life. Around 64% of global fish stocks are estimated to be overfished. Overfishing causes fishing fleets to migrate to new waters that would further deplete the fish stocks.

Moreover, it negatively affects coastal communities that rely on fishing to support their living.

TEN SIMPLE THINGS YOU CAN DO TO HELP PROTECT THE EARTH

Reduce, reuse, and recycle. Cut down on what you throw away. Follow the three "R's" to conserve natural resources and landfill space.

Educate. When you further your own education, you can help others understand the importance and value of our natural resources.

Plant a tree. Trees provide food and oxygen. They help save energy, clean the air, and help combat climate change.

Volunteer. Volunteer for cleanups in your community. You can get involved in protecting your watershed, too.

Conserve water. The less water you use, the less runoff and wastewater that eventually end up in the ocean.

Shop wisely. Buy less plastic and bring a reusable shopping bag.

Use long-lasting light bulbs. Energy efficient light bulbs reduce greenhouse gas emissions. Also flip the light switch off when you leave the room!

Don't send chemicals into our waterways. Choose non-toxic chemicals in the home and office.

Bike more. Drive less.

Thank you!

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