Heal The World!

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PLANET earth has sustained life for millions of years now! We often come across the question, 'Why are resources scarce?' The answer is pretty simple; resources are scarce because the resources available to satisfy the unlimited wants of a rapidly growing population are limited in amount. Hence, no matter how vast the world may seem to anybody, the truth is that we are growing in number. The environment in which we live will at one point, no longer be able to provide for our basic needs of food, clothing and shelter. It will have exceeded its 'Carrying Capacity', which in other words is the **maximum** number of species that can be sustained by an environment, without decreasing the capacity of the environment to sustain the same amount in the future. Thus, before the human race is wiped towards extinction, the United Nations Environment Program (UNEP) has mouthed its concerns about environmental damage by celebrating the 5th of June as World Environment Day.

The United Nations Environment Program (UNEP) is the voice for the environment in the United Nations system. It is an advocate, educator, catalyst and facilitator promoting the wise use of the planet's natural assets for sustainable development. It is very basic knowledge that the resources available to us from mother nature is bound to fall in supply, as consumption increases. To add to the natural shortage, are the negative impacts on the environment that are caused by the actions and behavior of mankind, itself. The greenhouse effect is a very commonly used term these days. Despite its repeated use in newspapers, journals, lectures and so on, I would still like to flag an 'apparently' dead horse one more time, so that everyone reading this article move out of their vague ideas and genuinely understand how they themselves are responsible for the dilapidation of a planet they call home.

Scientists have known about the natural 'greenhouse effect' for more than a century (Arrhenius 1896): the Earth maintains its equilibrium temperature through a delicate balance between the incoming solar energy (short wavelength radiation) it absorbs and the outgoing infra-red energy (long wavelength radiation) that it emits and some of which escapes into space. Greenhouse gases (water vapor, carbon dioxide, methane and others) allow solar radiation to pass through the Earth's atmosphere almost unimpeded but they absorb the infra-red radiation from the Earth's surface and then re-radiate some of it back to the Earth. This natural greenhouse effect keeps the surface temperature about 33°C warmer than it would otherwise be - warm enough to sustain life. Since the industrial revolution, the concentration of CO_2, one of the major greenhouse gases, in the atmosphere has increased significantly. This has contributed to the enhanced greenhouse effect known as 'global warming'.

The CO_2 concentration in the atmosphere is currently about 370 parts per million (ppm) - an increase of more than 30 per cent since 1750. The increase is largely due to anthropogenic emissions of CO_2 from fossil fuel combustion and to a lesser extent land-use change, cement production and biomass combustion (IPCC 2001a). Although CO_2 accounts for more than 60 per cent of the additional greenhouse effect accumulated since industrialization, the concentrations of other greenhouse gases such as methane (CH_4), nitrous oxide (N_2O), halocarbons and halons have also increased. In comparison to CO_2, CH_4 and N_2O have contributed about 20 per cent and 6-7 per cent respectively to the additional greenhouse effect. Halocarbons have contributed about 14 per cent. Many of these chemicals are regulated under the Montreal Protocol (see above). However, those which have negligible ozone-depleting potential are not controlled under the Montreal Protocol. Although they have accounted for less than 1 per cent of the additional greenhouse effect since industrialization, their concentrations in the atmosphere are increasing.

Some of the first results of the changing climate can serve as indicators. Several vulnerable ecosystems such as coral reefs are seriously endangered by increased sea temperature and some populations of migratory birds have been declining because of unfavorable variations in climatic conditions. Climate change is furthermore likely to affect human health and well-being through a variety of mechanisms. For example, it can adversely affect the availability of freshwater, food production, and the distribution and seasonal transmission of vector-borne infectious diseases such as malaria, dengue fever and schistosomiasis. The additional stress of climate change will interact in different ways across regions. It can be expected to reduce the ability of some environmental systems to provide, on a sustained basis, key goods and services needed for successful economic and social development, including adequate food, clean air and water, energy, safe shelter and low levels of diseases.

As far as measures should be taken to minimize global warming, producers on the economy must use their resources at maximum efficiency levels, waste management should be a major issue of concern to them (both tangible wastes and intangible wastes like gaseous excretions), recycling should be carried out and organic wastes should all be biodegradable. For an everyday household, they should have separate methods of disposing organic and inorganic waste, sewage and wastes should be maintained so that it does not leak into the environment, and cars should run only on four stroke engines so as to reduce the emission of green house gases. Any further queries on causes, effects and ways to minimize global warming can be found in the official website of UNEP (www.unep.org). My advice to every individual, all it takes to protect Mother Nature is being aware and implementing ones awareness through actions. You might as well start by not littering and refraining others around you from doing so. Little actions really do count! Heal the world, and make it a better place for you and for me!

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