Mother earth critical thinkings example

Sociology, Population



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Introduction.

Since the existence of Homo sapiens around 180, 000 years ago, human activities have been on the rise most of them with diverse effects on the environment. Human activities are responsible for almost all the loss in biodiversity throughout the globe (Southeast Asian Affairs 2002, pp 56). Biodiversity is not only unevenly spread across the Earth but also follows complex processes determined by the current changes in environment, global warming, evolutionary history of the planet and geology. Global ecoregions recognize that whilst coral reefs and tropical forests harbor most biodiversity there are manifestations in boreal and temperate regions, mountain chains and deserts, which risk being lost if not well conserved. Environmentalists and national leaders worry that the increased trend in population poses a significant risk on the available resources, and will trigger economic and social catastrophe if not contained.

Most of the projected growth rates take place in developing nations. These leads to increased challenges in terms of health standards, low levels of education, poverty, lack of shelter, economic and political domination by developed nations, and more so on natural resources. States in this situation

devote less of their economic energy on environmental issues rather focus on improving the welfare of the citizens, as well as national growth (Onn 2001, pp 32). This only means that environmental problems in these nations continue to intensify. Contrary, developed nations focus on increasing their production levels, and put minimal efforts in environmental conservative measures.

The relationship between environmental issues and the population continues to be complex as human activities increase in efforts to increase output. From this course I have learnt that individuals, communities, and human societies affect the environment in three interconnected perspectives; consumption or affluence, technology, and population size. Technology involves the use of resource and waste intensity factors (Kao 2010, pp 43). Resource intensity involves the number of resources that produce a unit product of consumption while waste intensity refers to the amount of waste that consumption generates.

In my own opinion, societal environmental impacts take two forms; first, the individuals forming these societies consume resources such as water, soils, land, water, and wetlands. As a result of the increase in population, these resources are over-consumed or the supplies of non-renewable resources depleted. The population also needs to be fed, and this calls for intensified agriculture. Whether organic or convectional, agriculture has some degree of effect on the environment (Rast and Jacqueline 2003, pp. 287). When new lands are put under cultivation, new ecological niches are formed and habitats destroyed.

Secondly, the population emits wastes as a product of consumption that

includes water and air pollutants, green house gases, toxic materials, and excess nutrients. For example, release of nitrogen into water causes algal blooms, which deplete oxygen and harm the aquatic life. Additionally, burning of fossil fuels such as coal emit green house gases such as Carbon Monoxide, which act as an air pollutant.

During the 1950's, the rising population in many countries spurred worries that most developing countries could deplete their food and water supplies. Among the first countries that reacted was India, which introduced the use of family planning methods as a tool for population control. The total fertility rates in the country declined to three children per woman from six children in between 1950 to 2000. In Asia, the program accounted for at least 80% of global fertility decline from 1950 to 2000 (Southeast Asian Affairs 2002, pp 76). China, on the other hand, imposed a limit of one child in every family. As much as the program was successful in India, the country is among the highest producers of waste. This indicates that as fertility falls, the desire for income grows leading to exploitation of many useful resources and lack of adapting renewing techniques. I feel that large societies may consume more resources that smaller ones, but technology choices and consumption patterns may account for more environmental atrocities than sheer numbers of people.

Among the significant effects that growth in population has on the environment, is global warming. Businesses have increased volumes of burnt fossil fuels to cater for increasing demands leading to increased production of toxic gases. Increased levels of cultivated land to feed the population increases levels of CO2 released into the atmosphere (Kao 2010, pp 27). This

is a significant challenge to environmentalists as it does not only affect the current generation but threatens the existence of the future generation. The debate revolves around how to reduce, or at least not to increase CO2 emissions hoping that the current amounts of emissions will slowly dissipate to the outer space.

Human communities require a growing amount of energy on a daily basis. If global warming is to be solved, there is the need to deviate to natural power. Most of the energy available to human beings is derived from sunlight, both from the stored fossil fuels that reach Earth eons and the sun that shines every day. In their greedy way, businesses ignore the existence of natural power, and the resource goes to waste (Onn 2001, pp 37). The question everyone would ask is on the sun's ability to produce power without generating gases that lead to global warming. I think that one way to achieve this is by implementing the 'Small footprint big impact' concept by using sunlight to heat water to make steam, and then generating this steam to power (Roberts and Julia 2002, pp 87). With electricity, human activities will still go on as scheduled or similar to when battery powered cars or electrically driven trains.

As a response to the over-consumption aspect to environmental degradation, scientists and businesses introduced the use of Genetically Modified Organisms (GMO's). Over 170 million of acres were converted into growing GMO's, by 1996, which were considered fast to grow, pest resistant, and highly productive (Rast and Jacqueline 2003, pp. 117). This implied use of lesser land as compared to when growing normal foods or putting most of the land into use. There was least consideration on the effects of GMO's on

the environment as their introduction was as a result of meeting the increasing consumption demands.

The World Health Organization (WHO) defines GMO's as organisms that in a non-natural way have an altered DNA. The plants are changed to be virus and pest resistant, insect resistant, or herbicide tolerant. My argument is that GMO's have significantly solved the problem of food demand but pose potential problems to the environment (Roberts and Julia 2002, pp 123). GMO's is highly toxic to non-target organisms such as butterflies and bees that boost pollination. On my view, scientists have not yet determined their long term effects (Onn 2001, pp 43). Research indicates that pests that are targeted by this agricultural method may adapt to the herbicides and pesticides making them resistant. This implies that they will still serve their purpose in feeding the world, but their toxic legacies will still remain. I think there is the need for further research on the effects of GMO's on the environment, which will trigger a change of focus from feeding the world to environmental preservation, which at this trend is more crucial than consumption.

The effectiveness of processes, policies, and rules set by different environmental organizations such as Environmental Protection Agency (EPA) and UNEP may never be realized if there is lack of human control and awareness. In my opinion, the first step to environmental conservation and protection lies on the level of individual involvement (Southeast Asian Affairs 2002, pp 63). This involves performing simple tasks that most people view as irrelevant or insignificant as far as environmental conservation is concerned (Small footprint big impact). For example, turning off computers at night or

when not in use, not pre-heating ovens before cooking, hanging clothes dry instead of dry cleaning them, planting trees, brushing without running, taking shorter showers, recycling unwanted material, and using rechargeable batteries, among others. These may seem as obvious activities, but most of them are ignored by the users leading to increased energy usage, pollution, and increased waste levels.

Human beings share the world with other species of animals and plants. As thus, all human beings should consider the consequences of their actions. Over the past decades, human activity has rapidly polluted and destroyed many ecological habitats throughout the world. The continued exploitation of certain biomes such as aquatic and forests may have severe implications, in addition to the current adversities. Forests are crucial biomes as they host diverse communities of the world. Hidden within them are potential medicinal herbs, climate-buffering capacities, and unseen species (Rast and Jacqueline 2003, pp. 98). Destroying them causes large-scale changes in climate.

Aquatic biomes are probably the most crucial and at risk of all biomes. Water is a key natural resource, supports countless life species, and is the basis of life. Freshwater biomes have suffered as a result of pollution from run offs and other industrial waste. This promotes the growth of algae, which when, dies leads to accumulation of dead organic matter that is a hazard to aquatic life (Onn 2001, pp 48). Additionally, the industrial waste leads to the weathering of soils along the shorelines of rivers, lakes, and oceans. Although erosion is naturally triggered, it is also dramatically triggered by changes in land use such as clearing the vegetation besides the water

catchment areas. Without the presence of such vegetation shorelines are exposed to erosion from wind, gravity, and ice, potentially resulting to loss of habitat, land, and soil stability.

Among the choices that are applicable to reduce this erosion and save the shorelines is bioengineering. This involves integration of engineering techniques using structures and natural materials to improve soil stability. Most of the world's shorelines have been affected as a result of human activity, and bioengineering is required to repair them with the intent of minimizing the overall effect on the environment. There is the need to adapt the various bioengineering solutions such as soil composition to save the shorelines, increase on water levels, and save the aquatic biomes.

Conclusion.

In my own opinion, conservation and protection of the environment is not a 'big' issue as many societies think; it only calls for a simple step of caring for the things around. It only requires keeping the environmental clean, being cautious of energy use, and reducing waste. This may call for using recycled materials like biogas, napkins, paper bags etc. Everyone has a responsibility no matter how minor it seems to conserve the environment. Such small footprints are what the environment requires for big impacts such as control of climatic changes and effects of global warming.

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