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The Prophecy of Sixth Extinction

COMMUNICATION SKILLS ABSTRACT

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1 Introduction

If all the 4.5 billion years of Earth's history was to be fit into 24 hours, man has existed for merely a one and a half minute. Yet human population has managed to dominate Earth. In that short period of time. It can said with a good amount of certainty that we rule the ecosystem. But we are not the first.

After 2nd mass extinction event, plants took over the land, and they could be said as the dominant species on Earth of the time. But due to plants huge population, they consumed a huge amount of CO₂. This led to reduction in the green houses gases, thus the greenhouse effect and temperature dropped leading to the 3rd mass extinction 252 million years ago. Later on due to series of catastrophic events such as meteor hits or volcanic activity, Earth's atmosphere had a lot of ash in it. This led to pollution and a rise in temperature leading to the 4th Mass extinction event, and paved way for the age of dinosaurs. The dinosaurs ruled the Earth for quite some time, but the cretaceous tertiary (5th) extinction killed them all (some 65 million years ago) and paved way for the age of mammals. This extinction took place due to change in climate, ash pollution in air, invasive species (the dinosaurs) leading to over harvesting. All this factored in the extinction, but it is not certain what caused the climate change and ash pollution.

To understand how mass extinctions might take place in the future, the earlier extinctions are studied. According to scientists, a mass extinction event is when 50% or more species go extinct within a short period of time on geological time line. The normal extinction rate is 10 to 25 species per year. These mass extinction events are caused by mainly due to following reasons:

1. Climate Change
2. Habitat Destruction
3. Invasaive Species
4. Pollution
5. Overharvesting

But scientist estimate that currently the extinction rate is at least 100 times to 1000 times the normal extinction rate. And there is a reason for this – mankind. Man, in the short period of time he has lived on Earth has caused all the five conditions to lead to a 6th mass extinction event. Man's invention of new and powerful machines has led to pollution. This has led global warming, which in turn has led to a lot of other problems. Also, to support such a huge population a huge amount of resources in terms food, potable water, shelter are required.

It is certain that we are currently undergoing the 6th Mass extinction, which is caused by us and will lead to our own extinction. It is seen that from last 12000 years human population growth is exponential in nature. But the growth rate is going down, hence it is expected that population growth will slow down as well. Here the Pareto principle comes into play, 20% of effort will give 80% of the results. Thus by controlling human population we can solve 80% of problems associated with overpopulation.

2 Effects of Human Over population

Human overpopulation is among the most pressing environmental issues, silently aggravating the forces behind global warming, environmental pollution, habitat loss, intensive farming practices and the consumption of finite natural resources, such as fresh water, arable land and fossil fuels, at speeds faster than their rate of regeneration. However, ecological issues are just the beginning. Some of the major issues are as follows.

- **Loss of fresh water:** 75% of planet Earth is covered in water. 97.5% of that is ocean and 2.5% is freshwater. 70% of freshwater is divided into glaciers and ice caps and the remaining 30% into land surface water, such as rivers, lakes, ponds and groundwater. Most of the freshwater resources are either unreachable or too polluted, leaving less than 1% of the world's freshwater, or about 0.003% of all water on Earth, readily accessible for direct human use.
- **Less freedom more restrictions:** : As population densities increase, laws, which serve as a primary social mediator of relations between people, will more frequently regulate interactions between humans and develop a need for more rules and restrictions to regulate these interactions.
- **Increased Global Warming and Climate change:** The largest single threat to the ecology and biodiversity of the planet in the decades to come will be global climate disruption due to the build-up of human-generated greenhouse gases in the atmosphere. Unsustainable human population growth leads us to conclude that we not only need smaller footprints, but fewer feet.
- **Species Extinction:** Human beings are currently causing the greatest mass extinction of species since the extinction of the dinosaurs 65 million years ago at rates 1000 to 10,000 times faster than normal. The 2012 update of the IUCN Red List of Threatened Species shows that of the 63,837 species examined worldwide, 19,817 are threatened with extinction - nearly a third of the total. If present trends continue, scientists warn that within a few decades, at least half of all plant and animal species on Earth will be extinct, as a result of climate change, habitat loss, pollution, acidifying oceans, invasive species, over-exploitation of natural resources, over fishing, poaching and human overpopulation.
- **Depleting of natural resources:** As the human population continues to explode, finite natural resources, such as fossil fuels, fresh water, arable land, coral reefs and frontier forests, continue to plummet, which is placing competitive stress on the basic life sustaining resources and leading to a diminished quality of life. The structure of the world's ecosystems changed more rapidly in the second half of the twentieth century than at any time in recorded human history, and virtually all of Earth's ecosystems have now been significantly transformed through human actions.
- **More Intensive Farming practices:** Intensive farming kills beneficial insects and plants, degrades and depletes the very soil it depends on, creates polluted runoff and clogged water systems, increases susceptibility to flooding, causes the genetic erosion of crops and livestock species around the world, decreases biodiversity, and destroys natural habitats.

- **Elevated Crime Rate:** As human overpopulation drives resources and basic necessities, such as food and water, to become scarcer, there will be increased competitiveness for these resources which leads to elevated crime rates.
- **Lower Life expectancy in fast growing Cities:** Humanity will experience a degradation of their quality and length of life as they face increasing difficulties to supply water, food, energy and housing to their growing populations, which will have major repercussions for public health, security measures and economic growth.
- **Increased emergence of new epidemics and pandemics:** Environmental degradation, combined with the growth in world population, is a major cause of the rapid increase in human diseases, which contributes to the malnutrition of 3.7 billion people worldwide, making them more susceptible to disease. Overpopulation exacerbates many social and environmental factors, including overcrowded living conditions, pollution, malnutrition and inadequate or non-existent health care, which wreak havoc on the poor and increase their likelihood of being exposed to infectious diseases.

Many scientist believe that humankind indeed is witnessing the 6th Extinction. Although it is clear that we are not just spectators, rather the cause of it. So its in hands of man to undo his doing, or atleast stop causing further damage

3 Different ways to avoid 6th Extinction

When thinking about how big politics might prevent big issues, the first thought one comes up with when going into 6th extinction causing problems is the straightforward relation that this has with climate change. This is a widespread field that has as the key of the utmost importance the heating up of the atmosphere. If going further into the latter, one may find burning fossil fuels and chopping down rain forests as the main sources for that fact. However, to switch into renewable energies, like wind, water and solar power, is not trifle but a matter of changing the direction which the economic system goes in. So as to set up a new direction in an economic system, almost everything related to a cultural change induced within the human population has to be reset. This means that a reconnection with the natural world by the society would stop with some of the issues causing climate change and species extinction. As a result of what is going on nowadays, it is seen that a 15% of land and 4% of oceans resources are already under protection but, however, this is clearly shown not to be enough. Some undergoing research demonstrated that if half of the habitats were saved, the result would give 84% of species saved. Another concept to take account into is the problem of human inequality. This is meant to be another issue causing instability within the population. All deviate from the fact that some of most iconic species are threatened just because some people, those who can afford it, bid for them into these black markets. This is similar to say that key decisions that affect the near future of the nature are left in hands of these minority. They seem to act neither against the interests of the greatest part of the society or of the nature. On the other hand, the poorest people of the society whose lives really depend on the state of the nature see in this minority a threat on their own lives. Finally, and alternatively to what is aforementioned above, slowing human population growth is another way to avoid such a big issue. The idea underlying is that more people means more food, more land and more resources. Demographics statistics, as shown before, reflect that population was about 4 billion in 1980. Nowadays the data has increased up to 7.4 billion and according

to United Nations estimations, the number will rise up to 9.7 billion by 2050. To sum up some of the concepts concerning the global equilibrium that would stop the threat of the 6th extinction, they would be:

- Cultural change: the need of changing people's mind leads to the fact that this would reset up everything that involves climate change as the key factor for foreseeable 6th extinction.
- Economic system: by ending the public subsidies that damage nature and, alongside, switching into renewable energies like wind, water, solar power would allow stopping the burning of fossil fuels that cause the heating up of the atmosphere. human inequality: the importance that the key decisions that affect the future of nature are left in hands of wealthy people that do not depend directly on the nature, as the poorest side of the society do, makes a big breakdown between these parts of the population.
- Give places back to nature: some researches bring to light that if 50% of habitats were saved, as a result, it would end in 84% of species saved. However, nowadays, just 15% of land and 4% of oceans are under governmental protection.
- Slow human population growth: the need of more resources arises from the fact that the population grows fast. The rhythm for nature's over exploitation so as to cope with such necessities is growing as the demographics do.

All these efforts reflect to the 20% effort in Pareto's principle. According to which 20% of effort will result into 80% of results. Hence, by doing small things as population control, we can a huge amount of problems resulting from overpopulation. We do not need to go to every endangered species and try to save it, currently yes they need protection. But once the effort to reduce human impact starts, nature will take its own course and start to heal itself and hopefully we won't be forced to escape to Mars. We as a humanity need to realize that the Earth does not belong to us, but we belong to Earth.