



An Inquest into the Impacts of Population Pressure on the Natural Environment and Human Society

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Abstract. The effect of population pressure on the environment has increasingly become a subject of intensive scholarly debate globally. This focus stems largely from the existential questions that attend environmental degradation and the scarcity of resources arising therefrom. History is replete with instances where an imbalance in the ratio of population to environmental resources resulted in cataclysmic dislocations in societal well-being. This study interrogates this phenomenon philosophically, albeit with copious reference to historical examples such as the 18th century *Mfecane* in Southern Africa, the collapse of Mycenaean Greece, Easter Island, the Classic Lowland Maya civilization, Angkor Wat in Cambodia, Great Zimbabwe in Africa, Norse of Greenland and the Indus valley civilization. Population pressure could precipitate pollution, poverty, war, land-hunger, deforestation, desertification, extinction of species, scarcity of fresh water, a decline of fish and game stocks and biodiversity. The collapse of an entire civilization becomes possible when these problems are ignored as humans exploit environmental resources to meet their needs. Therefore, this study posits that overpopulation has multifaceted destructive consequences for the environment, *mutatis mutandis*, humans and their societies and debunks the postulation, which John Zeaman noted, and increasingly referred to as the "Netherlands fallacy". The position of this fallacy is that we have nothing to fear from high population because the Netherlands enjoy a high standard of living, despite its high population density. The study draws attention to the need for population control, relative to available resources and human needs. The study adopts the philosophical methods of conceptual and critical analyses.

Keywords: Overpopulation, Ecological degradation, Resource depletion, Resource Scarcity, Population

pressure, Social disorder, Netherlands fallacy, Eco-balance,

1. Introduction

Everything is affected by its environment. Living things, including humans, adapt to their environment to survive. But unlike other biological entities, man has demonstrated the capacity to adapt to his environment to meet his needs. Therefore, man changes the natural world based on his needs and capacities. But two factors have turned such changes into a significant public policy issue. First, the population of the world has grown rapidly during the past several centuries, and this has greatly amplified humanity's impact on the environment. Second, the technological advances of the industrial revolution, which began in the 19th century, have increased our ability to modify our surroundings, with new kinds of effect that, even today, we only partially understand. It follows that overpopulation interfaces with most other environmental problems created by man's attempts to utilise natural resources to meet his needs.

The various problems, which arise from the human attempt to make the resources of nature available for his needs include pollution, greenhouse effects, global warming, acid precipitation, war, poverty, cropland scarcity, deforestation, desertification, extinction of species, species invasion, overpopulation, migration, scarcity of fresh water, a decline of fish stocks, loss of biodiversity, and so on (Homer-Dixon, 1999, pp. 52-72; Asthana and Asthana, 2012). It is important to note that some of these problems intersect. The human factor in environmental problem is not limited to the present age; it has been with humanity since antiquity. Therefore, it may be correct to say that environmental problems are not new. On the contrary, what is new is the increase in the degree of exploitation of natural

resources, its resultant problems and the amount of attention that people are now willing to devote to them.

Pieter Glasbergen and Ron Corvers (1995, pp. 1-2) relate environmental problems in ancient Mesopotamia many centuries ago. Here, large-scale irrigation led to the salinization of fertile agricultural land. According to them, this occurrence was one of the factors, which ultimately brought about the decline of Mesopotamian civilization. They also write that in medieval times, many people living in towns and cities suffered greatly as a result of widespread smoke pollution and contaminated water supplies. Similarly, the industrial revolution, which started at the turn of the 19th century, had a dramatic effect on the quality of the physical environment, not only in terms of public health, but also in the disappearance of all sort of age-old natural features. Pieter Glasbergen and Ron Corvers argued that in these instances of environmental problems, certain changes took place in the physical environment, which were either difficult or impossible to reverse.

This implies that the human misuse of nature is not unique to modern times. William Cunningham and Mary Ann Cunningham assert that Plato lamented land degradation that denuded the hills of Greece in the fourth century B.C. Plato complained that Greece once was blessed with fertile soil and clothed with abundant forests of fine trees. As the trees were cut to build houses and ships, heavy rain washed the soil into the sea, leaving only a rocky "skeleton of a body wasted by disease. Springs and rivers dried up while farming became all but impossible" (Cunningham and Cunningham, 2012, p. 20). Cunningham and Cunningham write that many classical authors regarded the earth as a living being, vulnerable to aging, illness and even mortality. Periodic threats about the impending death of nature, as a result of human misuse, have persisted till our own time. They argue that "[a]lthough many earlier societies had negative impacts on their environments, recent technological innovations have greatly increased our impacts" (Cunningham and Cunningham, 2012, p. 20). Environmental problems can best be seen today as global issues and problems, greatly intensified by population and resource depletion. The problems of overpopulation and resource depletion reinforce each other.

2. Population Problem

Until a few hundred years ago, human population was small, compared to what we now have (Cunningham and Cunningham, 2012, pp. 133-134). Reproductive technology, gene therapy, improved

dietary system, medical breakthrough, social security, political stability, sanitation, provision of drugs, as well as genetic engineering, among others, have contributed to the increase in human population. Consequently, there is pressure on the resources available to meet human needs. When these available resources are no longer adequate in taking care of the available number of people in such area, we have what is commonly referred to as overpopulation. Thus, overpopulation results when human population exceeds the available natural resources needed for the people living in a given area. Put shortly, it is when the available resources are unable to meet the need of people or when people and their needs exceed available natural resources. Thus, population constitutes an environmental problem when the available resources in any given area are inadequate for the available number of people in such an area. The problems of environmental resources, *vis-a-vis* population growth, are cyclical and they fortify each other. While the availability of nature's resources for human use reinforces population increase, population increase intensifies the exploitation of nature's resources and the consequent negative environmental feedbacks.

The view of Han Fei Tzū, a Chinese philosopher and legalist of antiquity, between 300 and 200 B.C., indicates that the problem of population, against the backdrop of a world of limited resources, is not new. He traces the problems of scarcity, poverty, poor standard of living, hunger, and social vices to population increase. According to him, it is not human wickedness that is responsible for social ills but the inadequacy of the resources of nature to meet the need of an increasing human population. He presents his argument this way:

In the past when men did not plough, they had plenty of natural kernels and grains to eat. When women did not weave, they had plenty of furs and feathers to wear. Though not engaged in labour, they lived on rich food. All that was possible because men were few and things were many (italics ours). Therefore, there was no quarrel among the people. So it was that even without large rewards and heavy punishments, the people could be kept in peace. Now, suppose there is a man who has five sons, each of whom in turn has five. Then, even during the life of the grandfather, there are already twenty-five descendants. Suddenly, therefore, men are many and things few. The people, though they work hard, live on poor food. This leads to quarrels among the people.... Thus, the moderns strive against one another not because they are wicked but that things are few (Chai with Chai, 1961, p. 217; Creel, 1953, pp. 122-123).

From his submission, we can infer that Han Fei Tzū would blame some social ills of today, such as bribery, corruption, embezzlement, kidnapping, oil bunkering, and other similar ills of our time, on limited natural resources. This shows the evident connection between environmental scarcity and social disorder.

Tertullian's position also shows that the problem of population pressure over available resources is not new. As far back as A.D. 200, he holds that:

Most convincing as evidence of populousness, we men have... become a burden to the earth, the fruit of nature hardly suffice to sustain us, there is a general pressure of scarcity giving rise to complaints, since the earth can no longer support us. Need we be astonished that plague and famine, warfare and earthquake, come to be regarded as remedies, serving, as it were, to trim and prune the superfluity of population (Nisbet, 1980, p. 52; Bailey, 1993, p. 41, Hicks, 1975, p. 90).

Reverend Thomas Malthus thought along this line concerning the England of his time. He observed that while human population was growing in geometric proportion, food supply was growing in arithmetic proportion. He, therefore, feared that if this trend of diametrically opposed growth continued, people would run out of food and famine would ensue and people would face hunger, disease, and war. But most people criticized Malthus' position as a pessimistic and utopian prediction, by pointing out that a perpetual state of worldwide misery had never occurred and that, among others, it is possible to supply food to England from other nations. This criticism, however, is not tenable because, if the trend continues, with time, the supplying nations would also run out of food. They would, consequently, be faced with the problem that was originally England's. Besides, when the problem becomes globalized, there will be no succour from anywhere. Speaking pragmatically, the consequences of hunger, poverty, malnutrition, among others, and their associated problems of diseases, conflicts, wars, illiteracy are undeniably evident in most parts of the world. The fact that a perpetual state of worldwide misery had never occurred, does not mean it cannot and will not occur.

However, some people argue that the world can accommodate many more people. They point to the example of the Netherlands. John Zeaman writes in 2002 that:

[t]he Netherlands is a small country with a population density of 385 people per km² (that is 13 times the density of the United States and 128 times

the density of Canada). Yet it enjoys a very high standard of living. Most people have enough to eat, good housing, good jobs, leisure time, good medical care, and so on (Zeaman, 2002, p. 50).

From this premise, the sceptics of overpopulation argue that we have nothing to fear from a high population. This kind of optimism is what demographers call the 'Netherlands fallacy'. Demographers "point out that the Netherlands uses roughly seventeen times more land than there is within the country for food and energy alone. The Dutch are importing or *borrowing*, carrying capacity from someplace else." From this, they argue that "[i]f the rest of the world tried to live with 385per km², the way the Netherlands does, there would be no extra land for anybody to import from. In other words, the Netherlands can exceed the carrying capacity of its... land only because other countries are living below the carrying capacity of theirs" (Zeaman, 2002, pp. 49-50). This can be explained with another example.

According to the United Nations, America and Western Europe are the highest consumers in the world. They live many levels above the subsistence level. They constitute the world's richest people and a small per cent (1/6) of the world's total population, but consume 80 per cent of the world's resources, while the 5/6 (poorer countries) consume only 20 per cent. According to the United Nations, "if the entire population of the Earth were to consume as much as the average American or West Europeans, it would take three planets Earth to supply the necessary resources.... [T]he developed countries have so far been able to live the way they do because so much of the world does not live that way. But what happens when they do?" (Zeaman, 2002, pp. 55, 51). According to John Zeaman, the fact that we are rapidly using up some resources that will take thousands or hundreds of thousands of years to replace, alarms many scientists and environmentalists who believe we are overshooting the Earth's carrying capacity and squandering a precious inheritance.

In 1968, Paul Ehrlich, a biologist and the best known of the modern-day Malthusians, wrote *The Population Bomb*. Ehrlich holds fast to his Malthusian position that humanity is courting disaster and cannot expect to keep pulling new tricks out of its hat. Unlike Malthus, Ehrlich goes beyond the relationship between population and food supply, to examine the capacity of the entire planet, its ecological systems and all its resources to support its entire population (Ehrlich, 1975, pp. 16-25). In *The Population Bomb*, Paul Ehrlich describes a stark future for the planet with too many people, dwindling

resources, massive starvation, and environmental calamity.

Ehrlich argues that we have the biological urge, reinforced by culture, for more reproduction. He puts it summarily that the world's population will continue to grow as long as the birth rate exceeds the death rate. The basic problem, therefore, is that there is not enough food today. How much there will be tomorrow is open to debate. If the pessimists are correct, massive famines will occur soon. According to Ehrlich, so far, most of the evidence seems to be on the side of the pessimists. He, therefore, admonishes that we plan on the assumption that they are correct. Again, he argues that unless we take the "birth rate solution," in which we find ways to lower the birth rate, then, the "death rate solution," in which ways to raise the death rate – war, famine, pestilence – will find us (Ehrlich and Ehrlich, 2009, pp. 1-4; Ehrlich, and Ehrlich, 2008). This is a worse solution.

There are many issues raised against this book, concerning failures of predictions and the gloomy character of the book. But forty years after *The Population Bomb*, Paul Ehrlich and Anne Ehrlich published *The Dominant Animal: Human Evolution and the Environment* where they had the opportunity to revisit some of the claims made in *The Population Bomb*, respond to some criticisms, and project some other new views. This book is an examination of how humans today are creating the world of the humans of tomorrow, and what it will take for our civilization to survive. The central message of this book is that "[w]e, as the dominant animal, have so altered the environment and so damaged our life-support systems, that the stresses on the living world are similar to those produced by a meteor strike in many ways. We may be facing the same kind of massive extinctions and changes in climate that the Earth saw when dinosaurs were wiped out by an extra-terrestrial body" (Diamond, 2004, pp.10-11). In assessing the merit of *The Population Bomb*, and in response to some of the criticisms of the book, Paul Ehrlich holds that the book was too optimistic because there are many calamities which have occurred, and some dangers with which we are now faced, which he never predicted in that book. Ehrlich maintains his Malthusian position that humanity is courting disaster and cannot expect to keep on manipulating the situation or tricking nature successfully all the time. Some of the insistent problems which result from overpopulation over the centuries include famine, disease and war.

3. Resources Depletion

The depletion of natural resources is one of the major problems that humanity contends with today, to enable it to meet human needs. Most other environmental problems are connected with it in one way or the other. As a result of human interaction, the resources of nature, whether renewable or non-renewable, have been seriously tampered with. Due to overuse, most agricultural lands lose their fertility. Fields are overgrazed and forests turned into grassland; these excesses precipitate erosion and desertification. Besides, bushes are overhunted of animals and rivers overfished while chemical usages degrade the quality of land, water and air. There is also the problem of deforestation due to over-logging, bush burning, farming, grazing, urbanization, industrialization, and so on. Deforestation is a threat to tropical rain forests. The magnitude of these impacts make the environment to lose its resources and regenerative capacity, and, thus, unable to meet human needs. These depletions pose threat to human survival and environmental sustainability. Just like the population problem, the problems of resource depletion, which we are faced with today, are not new. Sometimes, resources are depleted mildly or excessively, either due to greed, negligence, ignorance or real human needs. In whatever ways they are excessively depleted, feedbacks are always devastating, leading to scarcity, violence, war, social disorder, and even the collapse of civilization.

Jared Diamond investigates the causes of the collapse of civilization, as a result of depletion of resources due to economic activities. This investigation by Diamond (2004, pp.12-14) is concerned with how the human impact on the environment has led to the collapse of past societies. According to him, there is overwhelming recent evidence from archaeology, and other disciplines, affirming that some mysterious collapses consisted of self-inflicted ecological suicides. Some societies that destroyed themselves in the past, because of their inability to master their environmental problems, include the societies of the Fertile Crescent, where agriculture and metal tools arose, Mycenaean Greece, Easter Island and some other Pacific Islands, the Western Roman Empire, Classic Lowland Maya civilization, Angkor Wat in Cambodia, Great Zimbabwe in Africa, Norse Greenland, Indus Valley civilization, and so on.

Diamond argues that the experience of these polities is relevant to the environmental problems that we face today. Some current environmental problems, many of which destroyed past societies, and which are the main threats to us today as Diamond noted, include water problems, problems of deforestation,

the impending end of the tropical rain forests, overfishing, soil erosion, soil salinization, global climate change, full utilization of the world's fresh water supplies, our approach to a photosynthetic ceiling, exhaustion of cheap energy resources, accumulation of toxic chemicals in water, food, and soil, increase in human population, and increase in the per capita impact of our population. Diamond focuses on deforestation, which is one of the major environmental threats that we face today as a case in point. He uses Easter Island in the Pacific Ocean, which was originally covered by a tropical forest, as an example of a society that did collapse because of inadvertent deforestation.

What is the ecological cause of the collapse of Easter Island society? According to Diamond (2004, p. 24), after their settlement in A.D. 800, the inhabitants of this Island cleared the forest for many reasons, such as farming, firewood, and big logs out of which to make their dugout canoes for fishing. They hunted for land and sea birds and cut palm trees for food. Palm trees were also used to transport statues. Roads were prepared to transport statues with wooden crossbeams and then dragged over the roads. Then, logs from the now-extinct forest were used to lever the statues into a vertical position. In short, they exhaust all other available resources for their purposeful activities. By the time Easter's population grew after its settlement in A.D. 800 until it reached between 15,000 and 30,000 people around 1620, all of the trees had been cut down and were extinct. Also, all of the birds were extinct, except only a species of the sea bird. The exhaustion of the forest resources made it practically impossible for the inhabitants to continue any usual and meaningful activities. People then started starving and socio-political instability set in. With the end of the availability of dolphins, as the largest animal edible on Easter Island, Easter Islanders turned to humans as the next largest animal available to them. According to Diamond, Easter Island society collapsed into an epidemic of cannibalism. Between 70 and 90 per cent of the population consequently died out. After the population had crashed, there was no possibility of rebuilding the society because the trees and the soil fertility that were the society's basis were completely depleted. This example shows the extent of the calamity to which mismanagement of natural resources, environmental degradation, famine and scarcity of natural resources can plunge humanity. We must care for our global environment if we must avoid a repeat of such a historical accident.

4. Lessons for the Present World

From this historical accident of Easter Island, Diamond attempts to impart a lesson for the present world. He begins this way. Easter Island was isolated in the Pacific Ocean. As the trees were cut down and people had no more canoes, they could not escape and there was nobody to come to their help since it was an extremely remote and isolated island. According to him, Easter Island, isolated in the Pacific Ocean, is seen as a metaphor for Planet Earth, isolated in the universe. If we too get into trouble, there is no place we can go, and nobody will come to help us. Therefore, we should learn from history lest we repeat history. Today, we run a big natural experiment, but it is a worldwide natural experiment. If we do not run it well, then, the entire world may end up like Easter Island. According to Diamond, there are six and a half billion people today, whereas there were only 15,000 Easter Islanders. Today, we have metal tools and nuclear power whereas the Easter Islanders had only stone chisels. This implies that we have much more potent destructive technology (Diamond, 2004, p. 25). But there is a difference. In the view of Diamond, *we have a great advantage over the Easter Islanders. Unlike the Easter Islanders, we have archaeologists, books, and television, and so we can see the environmental messes that are being made elsewhere in the world, and we can also see the environmental messes that have been made in the past. We thereby have the possibility of learning from other societies, a possibility that Easter Islanders did not. We can learn which environments are fragile and where you have to be more careful, and that turns out to be rather complicated. We can learn why it is that societies may make mistakes, and so we can alert ourselves to the risks of unsuccessful group decision making. That's a hopeful sign* (Diamond, 2004, p.25).

Speaking philosophically, if past societies collapsed due to environmental problems and challenges, if the same problems that led to their fall are the same challenges we are faced with today, and if we have at our disposals more destructive instruments of intervention with nature than they had, the implication is that we and our environment are more prone to collapse, particularly due to the disruptive instruments at our disposal, unless we use them wisely. The fact and the knowledge that some societies have collapsed put us not only on alert that our society is not immune to collapse; more importantly, they also puts us on guard against what we have learned from their examples, particularly that we ought to use with prudence the interactive means at our disposal.

5. The Interface between Overpopulation and Resource Depletion

Scarcity of resources can seriously undermine human well-being. Thomas Homer-Dixon (1999, pp. 13-103) makes detailed connections between the environment, scarcity, and violent conflicts by showing how scarcity of resources can induce conflicts. He argues that the expected population in the future and the rapid growth of global economy will spur demand for natural resources. The world will consequently face growing scarcities of vital renewable resources. These environmental scarcities will have profound social consequences, such as violence in different faces. These environmental scarcities, according to Homer-Dixon, will arise from the degradation and depletion of renewable resources, and the increased demand for these resources, among others. In his opinion, scarcity will lead to deepened poverty, sharp social cleavages, and weakened social institutions. Violence will result from these social effects. Although he believes that human ingenuity can reduce the likelihood of conflicts, he argues that the violent consequences of scarcity should not be underestimated, especially because about half of the world's population depends directly on local renewables for their day-to-day well-being. He opines that in the near future, growing scarcities will affect billions of people with unprecedented severity and at an unparalleled scale and pace. This is because scarcities of renewable resources will be worsened in many parts of the developing world. Population growth, rising resources demand, and inequalities in resource access, will make scarcity affect many environmentally sensitive regions, with unprecedented severity, speed and scale (Homer-Dixon, 1999, p. 181). What these portend is that human-induced environmental pressure will affect the socio-physical and biological future. For example, the loss of biodiversity from deforestation will limit the opportunities of future generations to create new crops and medicine. Scarcity may lead to war, terrorism, and so on, among people and nations.

According to Homer-Dixon, “[p]reliminary research indicates that scarcity of critical environmental resources – especially of cropland, freshwater, and forests – contribute to violence in many parts of the world” (Homer-Dixon, 1999, p. 12). The complex causes of environmental scarcity are “the depletion and degradation of a resource..., the size of the resource-consuming population, and the technologies and practices this population uses in its consumption behaviour” (Homer-Dixon, 1999, p. 14). This shows that ecological imbalance can lead to social problems of a high magnitude. Violent conflict may aggravate

existing environmental scarcity because some of these resources may be destroyed or further degraded in the course of the violence.

Most environmental problems are anthropogenic, with moral, social and political implications. History is replete with conflicts and wars (with devastating consequences) that were caused by overpopulation. For instance, 18th century Southern Africa was marked by an explosive population expansion, which exerted tremendous strain on available resources. Hitherto, available land adequately supported agriculture especially cattle rearing, which was the mainstay of the economy. The semi-arid environment ensured enough grazing-land until it was overstretched by population explosion. This triggered a wave of migration among the indigenous Bantu groups such as the Ngoni and the Zulus, which brought them in collision with one another. This culminated in general instability and a series of wars, which in Sotho language is called the *Mfecane*, meaning crushing or hammering. The wars were not only protracted, they destroyed several polities and the economy of the region. As a result of displacement from their relatively well-organised production processes, many individuals resort to begging, which crystallised in the *finjo* (meaning begging) culture, in order to survive (Mashingaidze, pp. 125-143; Omer-Cooper, 1866). In this case, over-population, exacerbated other non-human factors such as low rainfall and insufficient grazing land, which were also implicated in the crisis.

6. Some Non-human Interactive Factors

The various human interactive activities explained above have variously altered, and are still altering the course of nature. It is important to note that non-human natural agents also have impacts on the environment, which, however, do not portend danger near those emanating from human interaction. Animals, plants, and even non-living things, just like humans, in the process of interacting with nature, alter its course. These affect eco-balance. Some of these occurrences are inimical to human well-being. But the impacts resulting from non-human agents are less threatening compared to those, which result from human activities. They can hardly, without complementary anthropogenic degradation, alter the course of nature significantly as to warrant the danger of human extinction and the extinction of the globe. In this case, nature, with an inbuilt regenerative capacity, may be able to replenish itself or regenerate what has been destroyed. Today, we cannot say the same concerning the effects which result from human interaction. According to Frederick Engels (Marx and

Engels, 1968, pp. 352-353), human alone has so succeeded in implanting his stamp on nature that the consequences of his action can disappear only with the general extinction of the terrestrial globe. This means that the effects of man's interaction with nature are indelible.

Overpopulation encourages excessive exploitation of natural resources; the resultant changes are, at times, unpredictable. According to John R. Vallentyne, “[t]he only certain prediction that can be made about the future is that it will be increasingly unpredictable” (Vallentyne, 1972, p. 194). This is more so as not much is being done to control world population, especially in the developing countries. Population growth has correspondingly increased human activities. In line with this, E.K. Fedorov argues that we have entered a unique and very important stage of our interaction with the natural environment of our planet. According to him, “the scale of society’s activity has grown so that it has become necessary to take into account the quantities *and qualities* – [*italics mine*] of all our planet’s elements” (Fedorov, 1983, p. 79). He continues: “Man...is constantly changing, extending, and perfecting the modes and forms of his interaction with nature, and in spite of the many negative consequences (for man himself) of anthropogenic actions on nature, on the whole, it must be noted, its development is increasing the effectiveness of the use of natural resources and properties of the environment” (Fedorov, 1983, pp. 80-81). This has led to the degradation of the environment.

7. Conclusion

This study attempted to analyse the problems of human population, resources depletion and limited resources, and how environmental resources depletion due to human intervention and human overpopulation impinges on and reinforces each other. Although the human original intention for interacting with the natural environment was to meet his needs, this interaction has led to some unintended consequences. Today, man intention for interaction has grown beyond the satisfaction of his need to his greed. With the tools at his disposal, he attempts to conquer nature to maximise his pleasure and minimise his labour and pain. This has led to intensive disruption and consequent dilapidation of natural resources, both renewable and non-renewable. On the one hand, the comfort, which results from interaction, has helped to raise human population. On the other hand, the rise in population has led to more impartation on nature to meet the needs of the rising population. This relation and reinforcement is non-

proportional. Hence mankind is faced with an inverse problem that can put its survival in danger.

This study is replete with examples in history of how some philosophers and other thinkers have been noting, and drawing attention to the social, moral, economic and political problems resulting from the imbalance of overpopulation over inadequate resources due to human impacts, and of the collapse of civilization or human population due to resource shortage or exhaustion. If we must not repeat history or make history to repeat itself in an uncomfortable, uncongenial, catastrophic and cataclysmic manner, we must learn from the unpalatable experiences of past generations to enable us sustain ourselves meaningfully at present and bequeath a meaningful and sustainable environment and its resources to future people who are our progeny for their survival. To succeed in this task, we must eschew greed and the spirit of consumerism, especially as it characterised the developed world, and imbibe the ethical principle of altruism or enlightened self-interest. We must relate with nature with care and love, without instrumentalizing it. We must make conscious efforts to control human population prudently and balance it with available resources to ensure sustainable development. Besides, humans must curtail excesses, take only what they need and not what they want from nature, because nature provides only according to our need and not according to our greed.

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