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STEWARDSHIP AND ENVIRONMENTAL CONSERATION: PRESERVING GOD'S CREATION

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ABSTRACT

The Environment is defined as humans and their relationships with the living and non-living things in the world. The Bible tells us that God created all things in the universe and that all was very good. He entrusted the world to humans whom he gave the gift of intellect to know good and evil. Human beings have used their gift of innovation that is in science and technology; to move from being hunters and gatherers to becoming agriculturists and industrialists. They have managed to make their lives better. But in their development, they have lacked proper planning for all creatures - both living and non-living. They have made the environment dysfunctional, therefore our mother earth is groaning. God's intention was for humans to manage and care for all creatures in the world. The environment is now in a crisis, the future of life on earth is uncertain unless humans start addressing this crisis immediately. There is global warming, desertification, deforestation, pollution, extinct of some species, and other environmental challenges like floods, and feminine. All these are caused by human activity which effect innovations and modifications. The spirit of humans' mastery of all God's creatures has led them to uncontrollable exploitation of the earth's renewable and non-renewable resources in the world. In Uganda there is an encroachment on the environment in several areas such as clearing of forests for settlement because of lack of control of the growth of population. This destroys the living and non-living creatures that make their habitant in forests and water bodies. There is also encroachment on water bodies, like Lake Victoria in Uganda, which is the second largest fresh water Lake in the world. If the encroachment on this lake continues at the present rate, it will disappear and the future generation may not find it around. There is great need for Uganda to put in place laws and sensitization programs, seriously aiming at sensitizing the masses on the importance of environmental protection in the country. Encroachment on both the forest lands and water bodies must stop. The government, NGOs and Environmentalists need to work together to overcome this problem before it is too late.

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INTRODUCTION

In the world today human life on the earth is faced with a lot of environmental problems caused by the idea of human mastery (Gen.1:28), over the real capacity of earth or in other words development or transforming our mother earth into better place to live in. This has come with a cost to all living and non-living creatures on planet earth. Global warming, extinction of species, various kinds of pollution, deforestation, desertification and consequently floods, famine, acid rain, diseases, drought, hunger, and war are some of the environmental challenges and their effects in our life which mostly have accrued from human whim and greed.

Tendency for growth and improvement without proper vision, plans, actions, and assessment has led to unwise development. As a result countries all over the world compete over development in ways that might compromise environment and scarce natural resources. When God created the world he entrusted it to human beings to manage and care for it (Gen. 1: 29), but they have instead taken advantage of it and made some places inhabitable like a certain place in Russia. Indeed the earth is groaning! The present generation has come to realize that there is an environmental dysfunction in the world today. This is because they have become aware that there are many changes in the weather and seasons due to the thinning of the ozone layer. There is uncontrollable exploitation of the world's earth resources. For example, a survey made by UNEP (1991) shows that the rate of deforestation in Africa is 4040 ha per year that is 0.6% per year and it is even higher in other

place in the world. This just one area, other areas where human beings have not fulfilled their mandate of caring for the environment properly is in land degradation, water pollution and population control (Ministry of energy report, 1991). Maybe that is why our mother earth is groaning. When we read from the Bible in Genesis 1:1-25, after creating everything, God saw how good each creature was and He was happy. Lastly He created human beings and put them in charge of all His creation. He said to them: "Have dominion over the fish of the sea, the birds of the air, and all the living things that move on the earth," (The African Bible, 1999:26). Many people have interpreted this in different ways. I think that God placed a big responsibility at the hands of humans entrusting them with the duty of managing and caring for other creatures.

If God saw that everything He had created was good then why should human beings disfigure it? In the Compendium of the Social doctrine of the Church, it is said that, "If man intervenes in nature without abusing it or damaging it, then he intervenes not in order to modify nature but to foster its development in its own life, that of creation that God intended it," (Pontifical Council for Justice and Peace, 2005:249). In this way humans are fulfilling their duty of managing and caring for the earth. In Psalm 8, the Psalmist says: "What are humans that you are mindful of them. You have made them little less than a god... You have given them to rule over the works of your hands, put all things at their feet," (PS. 8: 5-9). In fact, it was God's will that man becomes the king of creation, hence cooperating with the creator by using their intelligence in furthering God's work of creation. Through science and technology humans have used their God given talents to discover and develop the earth to its present status. Man has come a long way from being a hunter and a gatherer to one who can go to the moon! What has gone wrong why is our mother earth groaning then? Let us start with the situation in Uganda as a micro example.

Environmental Issues in Uganda

Uganda is known as the peal of Africa because of its natural beauty. Pearl of Africa Tours and Travel claims that, "Back in 1909 Sir Winston Churchhill called Uganda 'the Pearl of Africa,' a century later, Lonely Planet voted Uganda No.1 destination for 2012," www.lonelyplanet.com. Tours and Travel continues painting a picture which shows the beauty of Uganda by contending that: "Visitors fall in love with Uganda's breathtaking Rift Valley scenery, lush countryside and incredible biodiversity," www.pearlofafricatours.com. In the Daily Monitor, one of the leading papers in Uganda, David Sseppuuya also comments on the reasons why Churchhill called Uganda the 'Pearl of Africa,' mainly because of its beauty; now being distorted by human activity, (Sseppuuya, 2012). Indeed God has endowed Uganda! How can Ugandans best sustain the environment? If we want to sustain our environment we must find means of passing on to the future generation the resources and knowledge we have today so as to help them in turn to develop themselves. Afuna-Adula looks at the environment as having four dimensions: the ecologicalbiological, social-economic, the social-cultural and the time dimension. (Afuna-Adula, 2005:3). The Ecological-Biological is the relationship between the living and the non-living physical form of the environment, which forms one quarter of it. The non-living includes the rocks, soils, hills and

mountains, water bodies, ect.; and the living things are the forests and all plants of every kind plus animals. The second dimension is the socio-economic, this includes the social way of life, social institutions such as church and traditional institutions, and modern ones such as world bank which is involved in money and business, IMF, Cooperate Organizations, the socio-cultural which is involved with spiritualities of the local people their attitudes, names, medicines, social life styles, besides these, there is the ecospirituality and spiritual ecology, and lastly the time dimension, from time immemorial humans have always shared the environment with other creatures. With time humans began taking more than other creatures in name of development, (Afuna-Adula, 2005: 5).

Sustainable Environmental Development

Sustainability means 'passing onto the future generations the resources and knowledge of study needed for them to pursue their own development, in their own environment. In line with this, Afuna-Aduula confirms that, "According to the WCED, sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs," (Oweyegha-Afunaduula, 2004, 2005). In other words, sustainable development implies that economic growth and the protection of environmental quality must proceed on together, each reinforcing the other. Today, sustainability is seen as a link between environmentalists and developmentalists; both agree that there is need to view continuing sustainable economic growth and environmental protection, not as adversaries but as compatible goals of humanity in the new millennium. If viewed in this way, then there is no conflict between the environmentalists and the developmentalists. The World Conservation Strategy WCS (1980) presented sustainability as consisting of three dimensions that is: Accountability (in allocation of resources), Ecological disturbance (in deviation from sustainable ecology) and the explicit linkage between the rights of minorities and the right of nature that is the environmental and social justice. At the Conference on the WCS (1996), it was realized that the dimensions of sustainability are to be considered as political issues so that the political leaders can work on policies to save the environment, but this conference concentrated on the conservation issue leaving the sustainability issue at the hands of less knowledgeable politicians.

Another view is that of Oweyegha-Afunaduula who defines sustainable development as maintaining the delicate balance between the human need to improve life styles and the feeling of well-being on the one hand, and preserving the natural resources and ecosystems on which we and future generations depend. In addition to this, the WCED's definition agrees with this when it says that sustainable development is that which meets the needs of the present without compromising the ability of the future generations to meet their own needs, (2005). Is the present day population of Uganda thinking about the future generation in terms of environmental protection? When we look around our surroundings we find that people do not care, one of the signs is that some do not mind about garbage dumping and collection. They need to be sensitizes about this. It is good to remember that sustainable development must have two sides, that is, economic growth should go hand in hand with environment protection, that is, to say that people's economic growth resulting from human activities should not destroy the environment but care for it preparing it for the future generation. This is what God meant when He entrusted the world and all that it contains to human beings. They have the responsibility to make other creatures grow and prosper using their God-given gift of intellect and reasoning capacity which other creature do not possess. Having mastery over other creatures means caring for and making them better, in other words co-creating with God the Creator.

In 1972 the UN held a conference in Stockholm which discussed the causes that have led to the deteriorating trends of the environment in the world. Since then there has been a wide world acceptance of the importance of the environmental conservation. Hence the world conservation strategy and subsequently the report of the world Commission on the environment and development were developed in response to increasingly informed analysis of the link between the environment and development, (ICLEI, 1972). This report emphasized the social and economic dimension of sustainability, revealing links for instance between poverty and environmental degradation. It is said that sustainable development encompasses three dimensions: the Economic development, Community development and the Ecological development, (1972). This is supported by Oweyegha-Afunaduula contends that today sustainability is seen as a link between environmentalists and develop mentalists. Both agree that there is need to view continuity sustainable economic growth and environmental protection, (2005). If people are very poor then they will not care about the environment, but if they have the economic support then they will care for it because they know that what happens to the environment affects them as well. This can be illustrated by two slums in Uganda.

In Uganda there is an encroachment on environment in the slum areas, for example, there are many buildings being constructed in wet lands, like in Bwaise, and Kikoni the Kampala city suburbs, where it always floods whenever it rains. This is development but always comes with a cost because whenever it floods people lose their properties like household items such as cooking utensils, beddings chairs and the many others, at times even lives are lost. Besides this, there is garbage dumping in water channels. In such slums, there is limited latrine and public toilets, severe poor sanitation, high density dumping of human and animal feces, stagnant water, hence water pollution. When I made a survey in Kikoni and Bwaise this is what I came across: I found that there is lack of proper planning of the area. For example, developments in the area are haphazardly planned. Many people came from the village and turned the place into a slum area. This place is divided into two: one part is occupied by the rich, with good residences and the other by the very poor people who live in wetlands. Their situation is exacerbated with ignorance, illiteracy, poverty, low income, high fertility, low security and unskillful people in the area. All these affect people's ability to manage their environment and natural resources. This situation compels these people to destroy those very resources that are necessary to relieve them from hunger, and diseases. The poor people's priority is to satisfy their basic needs such as food, shelter clothing ect., hence sanitation and care of the environment is put aside. In fact to them the interaction between human and the environment and the consumption of natural resources is a matter of survival. I found out that poverty is one of the important causes of environmental challenges in Uganda especially in slum areas.

Sustainability of natural resources in Uganda

Frank Mulamuzi, an environmentalist advocate and executive Director of the National Association of Professional Environmentalist (NAPE) said that "Climate change does not happen in isolation it interacts with the existing problems and challenges of deforestation, soil degradation, declining food security, declining fish stocks and makes them worse," (Mulamuzi, 2009). This is true because there has been climate change causing changes in the seasons, for example in Mid-Western Uganda, that is former Bunyoro and Tooro people used to have two rainy seasons in March-April and September-October, but today this is unpredictable. They have long dry seasons and the rain comes at the time when it is least expected. Sometimes there are earthquakes, floods and dry spells. I think that all these are due to climate change caused by modifications in the world. Where are these modifications taking place in Uganda today? Nahashon W. Ndungu observes that the environmental situation in Africa is depicted as a pathetic one. Both humanity and nature are crying for healing. The majority of Africans live below the poverty line: and the situation worsens when droughts and famines strike, (Ndung'u W.N., & Mwaura F., Eds. 2005:56). This is happening right now in Karamoja, where there is food insecurity. Both humans and tame animals are dying of hunger and lack of water. This was shown on the National TV on 29th July, 2013. Many people were dying because of hunger and thirst because there is very little water in the area. Indeed Mother Earth is groaning. Some people say that this was caused by lack of rain and overgrazing.

The situation of poverty in Africa is clearly seen when one visits the city and town streets. One finds street kids, men and women and sometimes street families. Ndung'u urgues that, the street family phenomenon in urban areas has created a class of people with no source of livelihood or shelter and place to call home. Therefore, these people have nowhere to dump their garbage, no place to clean themselves up, and even keep the little property they have. They contribute in polluting the environment. They do not care about the environment their first priority is for survival. These people have no time to attend Environmental sensitization seminars, or even gatherings. They usually hide from the "Keep the City Clean" programs.

Forestation in Uganda

It is estimated that Uganda had more than five million hectares of forests in 1990, but by 2005, only three and a half million hectares had remained. Commenting on this the National Environmental Management Authority (NEMA), said that "If the rate of deforestation continues like this, then by 2050, Uganda will have lost all its forested land," (NEMA, 2006). This was attributed to several things like deforestation, expanding farmlands, rapid population growth and urbanization. I think this is true because population growth has led some people to migrate to other areas of the country. For

example the Bakiga from Kabale have migrated to Kibaale District in the former Bunyoro area. They have cut down many forested areas for farmland, but at the same time they have grown enough food for themselves and for sale to Hoima Town and Kampala city. Some people have migrated to Kampala city and town centers looking for jobs and good life but they have been disappointed and many have ended up in slum areas where life is so difficult. Due to migrations from rural to urban centers, areas surrounding Kampala city have already lost more than 78% of their forested land since 1990. It is suggested that NEMA and government are required to find urgent measures to mobilize the population for conservation of the present forest resources through a forestation and reforestation by educating the people about a degraded environment and its consequences, (AIR, WATER EARTH-AWE, 2013).

It is estimated that Uganda loses close to 73 hectares of forest cover annually, which according to some experts has been the country's biggest climate threat. It is said that at the center of deforestation is the lucrative charcoal trade. It is estimated that 95% of Ugandans depend on charcoal and wood for cooking, (Mulamuzi, 2009). The people who are carrying this trade are making a living from it. Some of them have become rich and bought Lorries to help them carry out the business. Others have hired many workers to carry out the trade they not longer go to the forests but remain at home looking for customers and convincing them to buy more at higher price. This trade is also known as "black gold trade." Unfortunately, this lucrative charcoal trade is not only wreaking havoc on forests alone but also on its famous inhabitants like the rare Mountain Gorillas which is big tourist attraction. This is an indication that people want quick money instead of thinking and planning for the future generations. People need sensitization about environmental protection for the future generation, (Mulamuzi, 2009). NGOs and government need to help people focus more on the environmental preservation for now and the future. When the forests are destroyed, even the other creatures that live there are killed or migrate to other places. For example, the rare gorillas that are, only found in Uganda. In a way it is to our disadvantage because tourists come from all over the world to visit us to see, and watch these rare animals.

Ugandans need to think about these things before the extinct of such rare species. In fact there other creatures that live in forests like small animals such as the colored lizards, the monkeys and all types snakes. Besides this, there all kinds of herbs which traditional medicine men and women collect from the forest, these are used to cure diseases and many people, especially those who cannot afford or do not like conventional medicine. Some people in Uganda prefer herbal medicine because it has no side effects like the conventional ones. It is said that Uganda is focusing on what is in Agenda 21, what was decided in the UN Conference on the Environment and Development in 1992, which set out 27 general principles, (The Local Agenda 21, 3rd Edition, 1996). This is a big document of 40 chapters with detailed recommendations to governments and organizations. These cover different things on the environment, social and economic issues. Regarding the conditions of sustainable development in Uganda, the Agenda 21 calls for the government to enact efforts for sustainable management of the environment, and the people of Uganda's

desire to have a balance between the conflicting demands of natural environment, social equity, economic development as well as the well being of all people in the community. (ICLEI, 1996) Despite the National Progress Assessment Report on the implementation of Agenda 21, yet the pace at which ecosystem and nature are being degraded has not slowed down, hence communities and individuals still face many problems, (Ministry of Water, Lands and Environment progress report, 2002). This is clearly seen when one visits the slums in Kampala, especially when it is during a rainy season, the floods are everywhere, the garbage littler the homesteads and paths ways. There are few public toilet facilities in those places, this worsens the situation and makes the inhabitants very venerable to different diseases. Indeed our mother earth is groaning at such sites. What can be done to see that every person in Uganda gets the message? Every person is responsible for the protection of our environment. More to this our government, NGOs and religious Leaders also have the mandate to rescue such situations. A human being is whole person, body, soul and mind plus his/her surroundings.

When one visits big forests like Budongo or Bugoma or Kibaale forests in western Uganda, on the surface one finds that these are indeed big with huge trees but this is only along the roadside, inside most of the trees have been harvested by those who need hard timber. It is a well known fact that it takes about one hundred years for such trees like mahogany, to grow to its full maturity. People need to be sensitized to know how to balance between the love for economic growth and respect for nature. No matter how much effort the International Communities and government may put in, if the local people are not convinced and committed to the environmental protection or if they do not see the usefulness of this, everything will be null and void, (Ministry of Water, Lands and environment, 2002). There is hope because a group of environmentalists have started using modern technology to reach out to people and sensitize them about the dangers of environmental degradation, especially in the areas of deforestation. Josette reporting on February 24th, 2002 said that, they have been collecting data and creating awareness with the phenomenon growth of mobile technology in the last 10 years. They are now able to reach out to many people in the country's most affected by deforestation. (Josette, 2012). It is said that this successful multi-layered campaign in which many organizations, individual citizens and media outlets in Uganda collaborated. It was the first of its kind and we hope that many more will join the struggle. This is a good example of joined effort to fight deforestation. If many more people are sensitized about proper protection of our environment, then both we today and the future generation will live a better life.

Water Pollution in Uganda

In Uganda we have several water bodies, these include lakes and rivers. To illustrate the extent of how our water has been polluted I will use Lake Victoria locally known as Nalubale. It is said that Lake Victoria is second largest freshwater lake in the world. It is share by three countries of East Africa, that is, Kenya, Tanzania and Uganda. It has a mean depth of 40 meters and maximum depth of 80 meters. The lake basin is used by communities and industries as a source of food, energy, water and transport. It is the source of River Nile, which is well known for white water rafting and flows to

Egypt through Sudan. (Nuwagaba, 2010). It is also said that the causes of rising pollution levels are many and each of the three countries sharing it is culpable. The lake has for a long time been a sink to excessive nutrients and untreated effluent that have led to fish die-offs, algal blooms and the spread of hyacinth, a dangerous water weed. Although most of it has now been cleared but whatever has remained is still causing danger to the lake and all living creatures in the lake, (Nuwagaba, 2010).

The Environmentalists say that waste management remains a big problem in Uganda. It has caused pollution of the environment including the soil and water. One of them says that pollution has greatly impacted on Lake Victoria. The water of the Lake has turned dark green because of pollution. In fact pollution has put the Lake at a risk of drying up. Long time ago Lake Victoria was surrounded by fertile land and used to receive steady reliable rainfall, but these days the are experiences long spells of heat. Experts say that now Lake Victoria is at great risk of environmental degradation because of unplanned development around it has destroyed the lake's catchment area. In addition to this the wetlands and swamps around the lake have been encroached on, and some wiped out. According to Simon Thuo, a water expert, the biggest urban Centers in the country such as Jinja, Kampala city and Masaka Municipalities are located around the Lake, therefore, releasing effluent into the Lake. The effluent is normally inadequately treated hence causing significant pollution. The pollution is worsened by lack of virgin land around the Lake, (Nuwagaba, 2010).

Another problem that has affected the Lake is human activity. Many people have built around the Lake, big buildings like several Hotels at Munyonyo, and other big houses, plus cutting down of trees, poor methods of farming. All these have denied the Lake enough ability to store fresh water. Experts advise that the Lake need some virgin land so that the water can be able to infiltrate and percolate. Fred Kyosingira asserts that, water naturally needs to move to the surface flow for it to be come out as sub-surface flow and this is the water that feeds the streams. It is also said that unchecked destruction of Lake Victoria's catchment area is going to expose the Lake and leave it vulnerable to siltation and possible drying up. In addition to this experts worry that Lake Victoria is not a deep lake therefore, its exposure to siltation and pollution makes it more vulnerable to extinction. Another dark side is that whenever the water becomes less, it also becomes dirty and creates a dirty environment where diseases such as cholera, tuberculosis, fever, diarrhea, anthrax, dysentery and many others emerge, (Kyosingira, 2013).

The dangers of mismanagement of Lake Victoria's catchment area are not only for the future generation but are being experienced even now. For example, the sewer system in Kampala city serves only a small percent of the people living there, just 10% of all sewage generated in the city gets treated. The rest for the slum areas, from Guest Houses and industries is discharged untreated as wastewater into Nakivubo channel which flows into Murchison Bay polluting and depleting the oxygen levels in the Lake. It is estimated that Nakivubo channel carries about 75% of the nitrogen and 85% of phosphorus nutrient load discharged daily into Murchison Bay. Ironically Murchison Bay is home to water treatment

plants that supply Kampala city and the neighboring towns. Right now Uganda National Water and Sewerage Corporation (UNWSC) is experiencing rising treatment costs because the water from the Lake is dirty and proving expensive to treat. (UNWSC, 2014). This means that many people in Kampala city and the neighboring towns do not have access to clean water. When God created the world He saw that everything was good but now humans have disfigured it, through pollution, deforestation, and other human activities.

Conclusion

When God created the world He saw that all that He had made was very good and entrusted this to human beings. Humans were given the gift of intelligence to help them invent and make modifications to let this world be a better place to live in for all creatures. The idea of humans' mastery over the universe has led to discovery in science and technology, transforming man from a hunter and a gatherer to an agriculturist and an industrialist but at the same times has made the world dysfunctional in some areas and the future of life on earth is in crisis. For example, in Uganda today, the environment protection is minimal because of poverty, greed of the rich, lack of government's good will. The government has put in place laws to protect the environment but the officials implementing them are corrupt so nothing is done or very little. The natural trees from the forests have been harvested and the living and non-living creatures have been denied a chance to live in their habitant, all is done in the name of development. The water bodies have been encroached on and denied their proper existence. For example, Lake Victoria which is the second largest fresh water lake in the world is at the verge of extinct if the encroachment does not stop now. Indeed our mother earth is groaning. There is hope a group of Environmentalists in Uganda are trying to sensitize the population about environmental protection through radio, TV and CMS. This is the ripe time to do this because some of our people destroy the environment through ignorance others do not care and some due to greed, especially the rich. The government laws are weak and their implementation is weak. The government Officials like those who work in NEMA need to be encouraged to do their work properly. The masses, especially those engaged in the charcoal trade need to be sensitized and perhaps redirected to engage in alternative jobs so as to save our environment.

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