### UNIVERSITY OF NAIROBI

# INSTITUTE OF DIPLOMACY AND INTERNATIONAL STUDIES

PERSISTENCE OF ENVIRONMENTAL CHALLENGES IN AFRICA: THE ROLE OF INTERNATIONAL AGREEMENTS.

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# **DECLARATION**

I affirm that is my exclusive work, thesis h	as not been sub	mitted to any	other academic
institution for inspection.			
Signature	Date		
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SUPERVISOR'S DECLARATION			
I verify that the work presented was carrie	d out by the ca	andidate under	my under my
observation.			
NameSignatu	ıre		
Date			
Institute of Diplomacy and international studies.			
University of Nairobi			

# **DEDICATION**

I am dedicating my thesis to my family who mean so much to me particularly my late mom and late sister Eva WaruguruWanjau, who was an environmentalist. They are no longer in this world but their memories live on. I also want to dedicate this thesis to my dad who is a retired teacher, my sisters; Eunice Muthoni Wanjau, Mary Njeri Wanjau and Deborah Wangui Wanjau who have walked with me.

I will do you proud.

Amen.

# **ACKNOWLEDGMENTS**

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#### **ABSTRACT**

This study recognize why we have persistent environmental challenges in Africa and also to examine the role of international agreements in encountering environment challenges. The society have contributed to the problems that we are having in our environment. They are so many rules and regulations set aside to curb environment issues this is creating a funding gap to solve the problems but we are not following them.

The aim of this study is to show how human impacts have affected the environment putting human development, security and human rights at a risk. The study examines how people are becoming aware of sustainable environmental problems like global warming and how they adjust to these problems by living sustainable lives meant to promote a healthy environment for not only themselves but also for the future generations.

To acquire this, the study called for a mixed method approach, and the results showed that we have a big problem in the environment. The research questions are answered through an experiment entails distributing questionnaire to the respondents, which are randomly picked based on their clarification they are asked to comment environment issues.

The responses received shows that there is a need to call the mankind to critically think about our impact and our effects on the environment because Unsustainable environment practice pose to increase threat to the earth climate ,water forests, over Population, deforestation, poverty in the world.

The results show that human activities create impact to the environment and therefore, this creates a need for people to be more responsible and play a more active role while solving environmental issues. It is recommended that United Nations, governments, businesses and the NGOS, the stakeholders, environmental groups play a big role in environmental awareness to the public further research needs to be done to strengthen the policies, give huge fines to those who do not follow the rules and regulations that have been set up to curb environment challenges.

#### **CHAPTER ONE**

### Introduction

Environmental problems have been there for many years, yet some of these issues still remain unresolved. This has been attributed to the dynamic nature of our environment as well as the ever increasing manmade effects on earth's ecosystems. Human activities are the main cause of environment problems<sup>1</sup>. The nature and magnitude of the environmental challenges has mounted since the 19th century.

Member states have come up with international agreements and have put in place policies to address matters concerning the environment. The United Nations, through the United Nations Environment Assembly made up of 193 countries, plays a vital role in developing and facilitating such policies and frameworks that are dedicated to work towards a pollution-free planet through harmonised management of the global environment. All this is done to ensure sustainability while passing on the realised benefits to the people, the planet and the environment.

The United Nations is a significant backer in safeguarding the future of earth's environment. However, this has been through global discussions and intergovernmental policy making bodies with emphasis on the commission on sustainable development. Despite the concerted efforts coupled with backup forces for a greater environmental protection, this fight has also been met with opposition.

The United Nations Environment 2017 annual report titled "Towards a pollution free planet." detailed that the campaign against the increase of air pollution had been as a result of the realization of the effects of environmental issues on health and well-being of communities and economies, example Malaria. Environmental issues such as population, pollution and climate affect human being and the planet as a whole. These challenges also have a negative impact on global efforts towards the realization of the sustainable development goals. Additionally, security of nations tends to be compromised due to limited recourses and as a result this leads to global conflict. For this reason, many stakeholders notably the United Nations have evaluated strategies to overcome the same. Sustainable environment has become an important concept in our lives, evidence of environment damage have threatened our livelihood.

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<sup>&</sup>lt;sup>1</sup> http://environmentalhistory.org/2012/07/16/about-environmental-history/

### 1.2 Background to the study

Human society have a long had a major negative impact on their environment their trend to exploit it as if it is an exhaustible resource has repeatedly lead to national calamities, sometimes it has led to human communities in Africa triple process of population growth, rapid industrialization and increased of fossils. Human impact has brought development and increased environmental challenges in Africa. Controlling the climate change, deforestation extensive urban degraded wood scarcity has become a problem in Africa arises from irresponsible exploitation of resources.

Our environment is shifting constantly and there is the need to be mindful of the challenges that surround it is unavoidable, current environmental problems in Africa require serious attention by educating the local public and within our relatives, this will help to play a big role in improving our environment for generations to come.

Global environmental problems continue to affect livelihoods to the point of causing catastrophic disasters. Therefore, there is the need to take urgent action in order to address the growing intensity of environmental challenges in Africa. According to National Environmental Management Authority .Kenya economic growth and development relies on its natural resources base, that is wildlife, mineral water, fisheries land, Agriculture and construction so there is need to utilize these resources in a sustainable way by communication, education and training between the public and enhance participation by all stakeholders and positively influence behaviour and attitude towards sustainable environment this will aid in achievement of Kenya vision 2030 goal of the attainment of a clean secure and sustainable environment for its citizens<sup>2</sup>.

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<sup>&</sup>lt;sup>2</sup>National Environment Management Authority. Communication guidelines for the ASARECA based project 2009-2010.

### The problem statement

The member states have to be blamed when it comes to environmental problems, we have clear rules and regulations which have been put forward since 1972 to curb environment issues yet we still have national calamities. The member's states needs to coordinate and respect the international policies that have been put forward. According to Prof Geoffrey Wahungu, " If all the stakeholders can support and participate in the strategy in implementing sustainable development programs and activities, then we can track the strategy, a monitoring and evaluation plan can be crafted<sup>3</sup>."

Deforestation is one of the biggest challenge we have, people cut trees example in Mau forest and yet they know the rules and regulations, this has brought water shortages in the society and yet the Kenya government has brought environment awareness to the public. Environment cabinet forest KeriakoTobiko on March 7th launched National tree planting season program in Ngong forest, said that each county will be required to plant minimum of million trees seedlings each year to achieve 13-15 precent forest cover by 2022.

Environment is a cross cutting issue because we get direct impact in our lives and if we don't take actions it will continue to affect our security, development and human rights. people become poor ,we will continue to lack proper balance diet, no access to basic needs, the recourses become few ,the diseases will increase, high population, high Pollution because of the industries are a threat, health issues will rise we because have diseases associated with climate change like malaria as put forward by Rachel Carson in her book silent spring.

Environment issues are a nation interest, everyone needs to be conscious because if we don't resolve and address major problems we will have bigger problems in future, all this issues hinder us from development in the country and all this is because we of lack of proper environment management.

There is need to offer an enabling environment and create capacity for the worried sectors, I call upon the member states and the society to critical think about our impacts on the planet earth which contribute to the challenges in environment, we will dealing with larger issues if nothing is done, we need to actions

<sup>3</sup>National Environment Management Authority. Communication guidelines for the ASARECA based project 2009-2010.

### **RESEARCH QUESTIONS**

- A. What is the impact of persistent environment issues on human development in Africa?
- B. What role do environmental international agreements play in countering environment challenges in Africa?
- C. What are the existing mechanisms put forward to have sustainable environment in Kenya?

### **OBJECTIVES OF THE STUDY**

- A. To examine the impact of persistent environment issues on human development in Africa.
- B. To examine the role of environmental international agreements in countering environmental challenges in Africa.
- C. To critically examine the mechanisms put forward to counter environmental challenges in Kenya.

### D.

#### GAP IN THE LITERATURE REVIEW

The member states are not following the environment rules and regulations that have been put forward to curb national calamities, if they can be huge fines put forward to member states and to the society that would help in solving some of environment challenges in Africa

### 1.7 JUSTIFICATION OF THE RESEARCH.

### General justification

To enable countries to take caution on human impact this will enable them to handle environmental disasters in Africa.

# Policy justification.

The study outcome will guide policy makers in Kenya on formulation of mechanisms that best align with international agreements in counter environmental challenges.

### Academic justification.

To enable scholars appreciate the relationship of environmental human activities and to strive above them for a better place in Africa, for future scientists and as archive for reference by the examination by researchers in future.

# 1.8 HYPOTHESES

- 1. Persistent environmental issues have had an impact on human development.
- 2. International agreements play a significant role in countering environmental challenges in Africa.

3Mechanisms put in in Kenya, in response to international agreements, have had an impact on countering environmental.

# 1.9 THEORETICAL FRAMEWORK

Idealism theory.

Idealist believes that the environment problems are global, but they have hopes that all will be well and what we see is a progression to issues and there is a need to work together and we have institutions that will help to improve our environment challenges.

My research will be guided by this theory because the Idealist says that the world means well and yes they are challenges but they can be overcome at a wider range of international agreement and directed by institutions.

Idealism theory is grounded on normative principle on international relations approach that seek to explain the world as it is and ought to be or should be ,they rely on human reasons and moral principle ,they also believe in international organization as forum for multilateral action and attainment of collective security. The league of nation was an important symbol of interstate dialogue and collective peace and security, this theory believes in international law and institution ,its capacity to prevent 2nd world war was simply a reflection of its institution weakness and mandate ,the reliance on international law ,legal treaties and conventions as settings framework for peace ,Global interdependence cooperation, emphasis on multiplicity ,purely of actors ,systems and structures required to set regulated collective norms and standard for promoting collective goods. Idealists have hopes in solving environment challenges and if they join hands and work together environmental challenges can be overcome in Africa.

### CHAPTER TWO

#### LITERATURE REVIEW

The United Nations first main conference on human environment was convened in Sweden. This conference highlighted the need for an international agreement work on environment that was mainly supported by the need to have common goals towards solving environmental problems. This was prompted by the realization that such issues could not be solved in isolation but rather if the desired output was to be realised, all the member states were to work together. It is this conference that thus set precedence in the development and use of internationally agreed upon policies that has become a norm in fighting for causes such as environmental sustainability<sup>4</sup>.

The Conference was key in promoting and creating an international environment politics, it came up with 26 principles and objectives which helped to address environment problems, the Conference main objective was to agree on a development scheme that would complement socio-economic development and lay a foundation for global partnerships, it also claimed that, man is created for this environment and has power to transform it, protect and improve it and man can discover or invent something new that we all can benefit from. The Stockholm conference stated that we must take actions or face consequences and to achieve environmental goals, the citizens, the community developed countries and least developed countries must work together. The goals established new equitable protect on global environment and development and recognize earth is our home.

Bill Kovarik, who is a professor and an activist Presented a detailed and interesting issue on environment, he states that from the first settlements up to date, we have concentrated more on war and politics rather than environment, Culture and development, he states that environment issues has suffered throughout human history but it is often found under public health, conservation, preservation of nature, diseases, air pollution and water pollution.

The Journal of Medical Ethics and History of Medicine in the early 1970's encouraged for thinking geared towards the philosophical aspects of the environmental challenges. The outcome as presented in the United Nations Conference in Sweden did establish a link between the environmental degradation and economic development. It was further established that little was done in terms of integrating environmental issues into national economic policy making and planning. In 1973, United Nation Environment Program made countries see the right to come up with international agreements to reduce environment problems. No nation can achieve sustainable environment on its own but together, they can fight the challenges.

Rapid population growth was established as one of the factors causing rapid deterioration of natural resources and the environment. This notion was further researched and advanced by Thomas Robert who developed the Malthus theory of population to support this. The theory holds that population and food supply are related and grow through a geometric progression on the other hand, production food is said to increase arithmetically. Therefore, the former, that is,

<sup>&</sup>lt;sup>4</sup> http://environmentalhistory.org/2012/07/16/about-environmental-history/

human population could thus be checked by food supply. Ultimately, the theory holds that due to increased population, food will become less available leading to incidents such as death of people due to shortage of food.

This argument as further developed by scholars such as Paul R.Ehrlich are also of a similar sentiment that population growth by then could have exceeded the available resources. This issue was also noted to put developing countries at a greater risk compared to their developed counterparts. To mitigate the associated impacts, Paul advocated for adoption of population control mechanisms to bring population level back to sustainable level. He added that, the Earth's has doubled, he wrote "The population boom theory "1968, and he said that there will be disasters for humanity due to overpopulation.

The works of Paul R.Ehrlich and among other different researchers formed awareness on the impacts of population on the environment. This in turn created an avenue for the matter to be researched further and thus more insights were developed. For instance the publication Silent Spring by Racheal carson is always perceived as a game changer in environmental history. It created a debate with nationwide interest on the relationship between people and nature. Also drawn in this debate were public health and conservation movements.

Though this was not the beginning of the "environmental movement", these events can be seen as major accelerators<sup>5</sup>. The reply to the rise of environmental movement of the 1960s, nations started to take caution to protector the environment within their borders. Governments realized that pollution did not rest at their borders. International consensus and cooperation were necessary to tackle environmental challenges. Donella Meadows et al (1978), make note of the limited status of the earth's resources matched with uncontrolled population growth would put undue pressure to these resources and hence related shortages and events such as famine of the resources. During the Stockholm Conference, the Indian Prime Minister Indira Gandhi, did link poverty as an environmental problem. In light of this, the prime minister did urge the developed nations to help poor countries in order to create and develop capacity of these nations in addressing environmental problems.

The principle 'Right to Development' was adopted during this conference. It proclaimed that developing countries should not be penalized by the environmental policy but rather economic growth was to be given priority. The second theme the conference sought to demystify was the notion, that the poor nations are likelier to cause environmental harm than the wealthy.

Such beliefs result in undue controversy as they focus on how the poor mostly farmers and or urban city dwellers through activities such as clearing forest land for agricultural purposes, use of wood fuel and other cheap fuels. It should be noted that this assumptions do not always give similar consideration to the consumption levels among the wealthy sections of society. By the end of the Stockholm conference, the general consensus was that all parties could identify the environmental problems they shared in at a global scale.

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<sup>&</sup>lt;sup>5</sup>https://www.litcharts.com/lit/silent-spring/summary

Deliberations at the Stockholm Conference revealed that the world was basically separated into the rich and the poor in as far as environmental values are concerned. Since 1995, yearly COP meetings are being held regularly, unless the Parties decide otherwise. The Kyoto Protocol 1997 and the Paris Agreement 2015 have been phenomenal meetings which led to the signing of treaties on climate change mitigation and adaptation.

United Nations Conference on the Law of the Sea, 1973 and 1982, regulate all the actions that take place at the borders and international agreements, productivity, and maintain peaceful relations on the sea. One of the major goals was to safeguard wild animals and plants from loss due to uncontrolled trade. The members required the governments to use export rules from the originating countries to limit import of animals.

The goal was unsustainable with the absence of a regulatory framework to help countries in administering such limitations; this led to the general assembly passing of a resolution which called for an international convention that was involved with regulation of export, transportation, importation of endangered wildlife species, skins and trophies. The demand for unlawful products rises poaching and smuggling of the endangered species which cannot be tackled, unless consumer countries complement the efforts of producer countries through applying strict controls, before being given a licence one must through an authorised system. Kenya during the 17 COP held in South Africa did make a request for an end in the commercial trade of elephant tasks.

United Nations framework climate change was put to force in 1994; the treaty was developed to talk about climate. According to John Houghton, climate change, and resultant global warming can be seen as a weapon of mass destruction. In agreement to these sentiments, British scientist, Sir David King, is of the opinion that climate change is even worse than any threat of terrorism. The United States of America is seen as the principal deterrent in failing to address these concerns. The USA, he said, 'ought to take the threat of global warming more seriously'. Paris agreements reinforce global answers to climate change and also reinforce skill of countries, deal with effects of climate change. UNFCCC Supports all institution involved in climate change Negotiation. The convention on climate change understood there were environment challenges, they set goals and put developed countries on the lead to get funds from developing countries to solve climate change.

According to Al Gore he wrote "The earth is the balance, he states that environmental threats have proven, his information and predictions still remain to be correct even after these were made more than two decades ago. Among other predictions by Gore include habitat loss, poor water quality to the loading our livestock with antibiotics.

The Basel treaty on the regulation of Trans- boundary movements, this convention culminated to an international treaty that major agenda is to stop the progress of hazards waste. More so, it did safeguard such movements in favour of developed nations who were damping their waste to their less developed counterparts. The Convention was meant to control the disposal of toxic wastes produced, and protect our surrounding.

The Vienna convention on the protection of the Ozone layer was a multilateral environmental treaty drafted in 1985 and fully enforced in September 1988. It acts as a guide for the international efforts concerted towards protecting the ozone layer. Biodiversity is pivotal in sustaining human life on earth. Biodiversity is important, it ensures food production- Insects, birds, bats and other animals act as agents of pollination, Organisms like earthworms and bacteria are responsible for recycling organic material and maintaining the soil productivity. Parasites and predators serve as agents of natural population control. It sustains rural people's livelihoods. International community cannot ignore the environment changes but instead they should strive towards integrating environment challenges in bilateral and multilateral foreign policy discussion and come up with international agreements to ease conflicts to build confidence and secure stability in Africa. Environmental problems are central to the relationship between international relations and the environment; unless human being changes their own consumption and pollution to natural resources then we won't resolve global environment issues. We need to read and think about this book written by Alan Weisman "The world without us".It explains what would occur if human were to disappear from earth. Weisman offers an original approach to the questions on humanities impact on the planet earth. He challenges us to imagine the earth without us. He further notes that our substantial infrastructure would collapse and eventually vanish without any human presence further noting it is possible for a stable environment to occur without humans.

# THE IMPACT OF PERSISTENT ENVIRONMENTAL ISSUES ON HUMAN DEVELOPMENT IN AFRICA.

The relations between humans and the environment are at the centre of sustainable development. Apart from international issues, human activities are becoming more and more, bringing a risk to human development. The challenge is to identify behaviours in which environmental sustainability can positively contribute to the achievement of development goals<sup>6</sup>.

Environmental crisis in Africa are increasingly affecting human development. We have high birth rates increased, death rates, high population size, and rapid population growth, all leading to higher demand on the African governments' resources. The in productive activities which are unemployment, underemployment, poverty, urban slums, crime and political instability.

2.1 Environmental issues on human development.

Africa has been challenged that it performs poorly in regard to guarding the environment. According to Willem Daniel, problems like population, pollution, climate change still exist yet the government and organizations such as the Africa Union have set legal frameworks to counter environmental issues<sup>7</sup>.

<sup>&</sup>lt;sup>6</sup> https://www.prb.org/un-human-development-report-2011/

<sup>&</sup>lt;sup>7</sup> https://www.weforum.org/agenda/authors/willem-daniel-lubbe/

In Africa we depend heavily on natural resources, the national resources include; land, water, trees, firewood, ocean and fresh water for fisheries at the household and community level. For our economic development we rely on; cash crops, mining, and forestry. Natural resources are irreplaceable so it is important to conserve the environment.

At the Stockholm conference, a lot was accomplished in the following years towards integration of environment distresses in to economic planning and decision making campaign by the environmentalists groups and non-governments association they played big position convincing nations that the decline of the environment was increasing at an shocking rate.

Article 24 of the African Charter on human and people's Rights, put it strongly that we are all entitled to live in a normally suitable surrounding so that we can have development. Human well-being and quality of life relies on the availability of food, water, energy and biodiversity accessible to man.

# 2.2 population and environment in Africa

As populations increase, the demand for natural resources rises. In 1798, Malthus saw that human population increase could be checked by the available food supply and he thus advocated for population control to avoid reaching this state. Presently, the idea of over population has been redefined paying more emphasis on the unequal distribution of resources as opposed to it being a matter of population increase. This has in turn created a need for controlling the available resources with studies linking poverty to the witnessed variations in land productivity and availability of food.

The impact of population on the environment has also been mathematically modelled and determined by the size of pollution, affluence and technology.

### 2.3 impact of Pollution on human development in Africa

Regardless of the collective frameworks which have been put in place such as; the London Long-Range, Trans boundary Air Pollution agreement, the Montreal Protocol, the Rio summit 1992 and Kyoto Protocols, and the formation of the Environment Agency, the frameworks tend to counter pollution. With the increase of human population, we have also witnessed increases in standards of living, capita resource use, capita waste generation which in turn affect our human development negatively. We require global co-operation and in local actions of all people. Pollution and resource degradation is increasingly becoming problematic global issue which affects us all.

# 2.4 Climate change and human development in Africa

Uncertainty is one of the biggest challenges we have when it leads to climate change. Impact of climate changes on human development; is manifested through; floods, drought storms which devastate our economy. Human induced climate change emanating largely from the rise in the

greenhouse gases in the atmosphere has brought about great challenges facing man in 21st century. Challenges have been addressed by UNFCCC and it calls for a balance of the green gasses emissions in the environment.

Benjamin Jones examine that the higher temperatures in poor countries leads to large negative impact on growth of exports he declare that poor countries will experience the burn off the negative impact on climate change<sup>8</sup>.

To counter we must entail a harmonious integration of a sound and visible economy, have responsible governance and ecological integrity because economic development leads to the rise of capacity to address environment and social issues.

2.5 Environmental challenges are difficult to solve thus affecting human development in Africa due to.

### Uncertainty.

One is not certain about our environment despite the large research dedicated towards understanding the environment. Environmental change is not a new phenomenal, however ongoing uncertainty about scientific facts regarding what is to come, we cannot be sure what the future hold for us. In reaction to population growth, global warming, the new technologies may replace the new environment resources. Scientist and government face big problem and the need to make decisions on the best information available.

#### Stakeholders.

They are too many Stakeholders, that are government, private sector, learning institutions, civil society organization and general public. The range of definitions and interpretations to sustainable environment are proposed by many groups are supposed to implement Agenda 21 and make decisions .stakeholders can play a big role towards planning and implementing environment sustainable development.

#### The North South divide.

The issues of the Sea level rise illustrate problems; sea level rise is seen as global warming problems attributed to the wealthy developed countries of the West. Issues of biodiversity conservation also illustrate the North South divine. Arguments over who is the cause and responsible. In 1963 we had the North South dialogue, this was a process through developing countries engaged in negotiations with developed countries they were political negotiations to solve economic problems. In 1963, UNCTD was established act as forum to negotiate and address foreign Aid, trade and tariffs.

## **Consumption and lifestyles**

The meanings of sustainable development, entails attaining the basic human needs while at the same time safeguarding justifiable economic growth that, reflect the levels of consumption and lifestyles for the various stakeholders. For developing nations, it is seen that they are seeking attainment of the living standards as experienced in the already developed countries. Despite

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<sup>8</sup> https://voxeu.org/article/does-climate-change-affect-economic-growth

being seen as a good gesture, it presents a pitfall of enormous environmental effects as such impacts can be directly correlated with the population.

Therefore, it is important that this growth as envisioned for the developing countries be matched or rather counterbalanced by lowered ecological footprints in the already developed countries. However, this might not always be the case as resistance in making the concessions to accommodate the lifestyle changes experienced in developing nations by their already developed counterparts<sup>9</sup>.

### The United Nations funds.

The Environment Fund finances the essential capacity needed for the delivery of UN Environment's programs of work globally and from a strong regional basis. Key elements are: Identification of new emerging environmental issues, Innovation for addressing environmental challenges, advocacy and awareness raising, essential capability to provide capacity building services, results-based planning and management and Robust oversight. Funding the Environment Fund is the responsibility of the Member States. Universal membership to the United Nations therefore should facilitate economic support through financial contribution by all member states, however, the environmental challenges are too many for any member states to fail to contribute and when we have a natural disaster we should stand with affected country 10.

### **Inadequate technological infrastructures**

United Nations environment Program estimates that electronic waste to the tune of 50 million tons is generated worldwide. Over the years, this kind of waste has emerged as a major component of the total waste produced. This increase can be attributed to increasing use of electronic commodities such as mobile phones, computers, television set, refrigerators, radio are complex multi material waste streams of flame retardants used in plastic circuit board thus posing serious risk to our environment and health. Material recovery exist example copper, tin ,aluminium, iron ,silicon, zinc and cold can be recovered from the waste material stream and used for other economic purposes but due to lack of adequate technological infrastructures in Africa material recovery initiative is informal and significant .

For example in Nairobi Kenya, the available declaration on the environmental management in as far as electronic and electrical waste is concerned was put in place in the year 2006. However, the supporting work plan on the E waste has not been fully implemented in the country. A study done by the ICT action network in 2007 revealed that 1513 tons of electronics entered the market in the same period. However, there is a need for further research on electronics goods and associated E waste generation in Kenya to establish the trends as currently experienced.

<sup>&</sup>lt;sup>9</sup> https://www.greenleft.org.au/content/environment-and-north-south-divide

<sup>&</sup>lt;sup>10</sup>http://www.unesco.org/new/en/culture/communities/partners/the-united-nations-funds/

## **Achieving sustainability**

There has been a need within the international community to act towards resolving global environmental issues since 1972. This has necessitated that action towards realising the same be taken from the local levels and these be reinforced through a collaborative approach at the global level by working to meet commonly agreed upon goals by the member nations. The collaboration between local level and global level environmental decision-makers should thus result in creating a mutual understanding which in the long run will be more valuable and create dialogue for a sustainable environment in Africa.

# 2.2The effects of environmental international agreements on countering environment al challenges in Africa.

The past decades have witnessed an unprecedented exploitation and subsequent degradation of available resources in our planet. This in turn has left us exposed to cyclic natural calamities such as flash floods, drought, tsunamis and cyclones. Pollution growth and international economic expansion, human doings, energy demanding activities have changed properties of earth atmosphere through conversion of the underground fossilized carbon and emitting it in to atmosphere in form of  $C0_2$  among other gases such as methane, sulphur and oxides of nitrogen. These inturn resulted in altered climatic systems in Africa.

### 2.1 United Nations framework Convention encountering climate change.

This is a big problem because climate change affects Africa indirectly; this has been through the adoption of the recommended strategies as proposed during the enforcement, this is among the strategies proposed aim at stabilizing the concentration of greenhouse gas emission and attentiveness into the earth's atmosphere.

Among the proposed measures include the use of techniques such as tree planting to curb and mitigate effects of greenhouse gases, the trees play a big role in the environment they confiscate and thus their degradation especially at a large scale level would result in accelerated environmental change through global warming

Deforestation is when we destroy our forest by cutting trees and burning of charcoal, it is estimates around 18 million acres of forest is lost yearly by United Nations' Food and Agriculture Organization. Common methods that are used to undertake deforestation include burning trees and clear cutting. In addition to being controversial, these strategies leave the land completely barren and exposed to further degradation by the elements such as wind and water. Burning of forestlands among other vegetation has been cited through research to be the second largest contributor of carbon to the atmosphere.

The causes and consequences of deforestation around the world are controversial because the growing population leads to the clearance of forests so create more human habitat and growth of new urban areas. It's controversial in the sense that the more we cut down trees the more the consequences of deforestation affect human population around the world. Some of the deadly diseases which most of the population around the world suffer from such as cancer of the skin

and other respiratory diseases such as asthma are as a result of deforestation. Acid rain which is experienced in most of the countries around the world and which affects highly the marine life is as a result of deforestation. In a nutshell we can say that most of the environmental problems we experience today are due to majorly deforestation.

Deforestation causes and consequences are controversial because most of the institutions such as NEMA, KFRI, and Green Belt Movement in Kenya are entrusted to protect the environment they are behind logging and cutting down of trees for commercial purposes or settlement of people. In the recent past the issue of logging in Mau Forest has hit the limelight and the shocking bit was that the people who are expected to enhance against logging and cutting down of trees are the people who own acres of land and who give permit to charcoal burners and timber companies licenses to cut down trees, the late Professor WangariMathaai who advocated for the protection of the forests such as Karura forest and the Uhuru park area which the regime in power wanted to be cleared and buildings set up.

#### **CAUSES OF DEFORESTATION**

It is majorly caused by wildfire Mt Abu wildfire logging for example most forests in Kenya like Mau forest is being cleared by logging activities and agriculture. Agriculture is perceived to be the biggest contributor to deforestation. It is characterized by felling of trees among other vegetation to make room for livestock and crop production.

Consequences of Deforestation

Loss of species: forest ecosystem play host to over seventy precent of the world's plan and animal populations. Therefore the loss of forests translates to a loss of key habitats and subsequently even to the loss and extinction of plant and animal life. Additionally, loss of habitats can also result in loss of useful biodiversity used as medicine by humans.

**Water cycle:** forest facilitate occurrence of the water cycle. This is achieved by creating micro climates that make it possible for rain to occur as well as regulating the amount of water vapour key in maintaining the water cycle. Through studies, it has been established that trees do play a key role in protecting against pollution of ground water

**Soil erosion:** roots from trees and other vegetation are important in hold together the soil structure. Trees hold the soil so that not to be washed away by the wind. consequently leading to vegetation growth problems. A comparison of Haiti and The Dominican Republic clearly highlights this whereby the former due to its low forest cover always undergoes through extreme cases of soil loss, flooding and landslides issues.

**Life quality:** Soil erosion and subsequent deposition into lakes among other water bodies affect the water quality rendering it of unusable and subsequently contributing to poor health in the general population in affected areas.

**The disruption of indigenous populations:** Many native tribes residing in the forestlands are in danger of losing their homes and source of livelihoods if unwanted destruction of these forests.

Climate change; forest soils are mostly moist, when left uncovered; they dry due to exposure to the sun. Forests give us water series when they turn water vapour to the atmosphere as well as

enhancing ground water recharge. Therefore, without trees facilitate these roles, many former forest lands are prone to becoming barren and ultimately desertification will take place

**Increased of greenhouse gases**; trees are also critical in the absorption of carbon dioxide that cause global warming. When we have less forest this is seen and the outcome is the amounts of greenhouse gases incoming to the atmosphere and amplify the speed and severity of global warming<sup>11</sup>.

Therefore it is imperative that forested areas be carefully managed and preserved. If at all any form of excision is be done, this has to be methodical and balance

# 2.2.1 Role of United Nations framework convention on climate change in countering environment challenges in Africa

Rio environment Conference 1992 is one of the biggest accomplishments that were signing in of the treaty on climate change framework. This prompted the leaders who are in the authority to take a further step forward by adopting the Kyoto Protocol; this was a big step in the convection framework on climate change.

The Kyoto Protocol gave original basis with its lawfully requirements constraints on greenhouse gasses emission. The protocol offers an innovative mechanism aimed at cutting the cost of curbing emission.

During this convention the government also launched National plans for countering green grass mission in the Rio conference it also provided finances and technology to support developing countries and this lead to Rio summit which led to the signing of Kyoto Protocol.

People in developing countries are disclosed to the high danger of adverse impact from climate change and its effects such as human health, water supplies and Agricultural products. The accumulation and continued addition of green gasses in the atmosphere since industry era will continue to affect the climate change we need to come in terms with climate change and have clear policies to drive us towards sustainable development.

### 2.2.1. Challenges of United Nations framework convention on climate change.

The greenhouse gases emissions reductions would require restructuring of economy and energy infrastructure, the level of economic activities increase of green gases houses emission and this lead to poverty in developing countries because man is the enemy of the climate.

## 3.2 Vienna convention for the protection of the Ozone layer 1985.

Degradation of ozone layer by man-made chemicals was first revealed in the 1970s by a scientist who won the Nobel prize-winning called Paul Crutzen he says that this phenomenon as "the worst disaster to hit the global environment". However, this realisation led to a swift global action in 1977 by the UN Environment Program (UNEP) that culminated in the development of a world plan Action on the Ozone Layer. This was subsequently followed by development of a global framework Convention on stratospheric ozone protection. This was later adopted by the international community during the Vienna Convention in 1985 followed by the Montreal

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<sup>&</sup>lt;sup>11</sup> Environmental Protection Agency

Protocol in 1987 respectively. The two conventions, provided for the protection of the ozone through prohibition of substances that were known to cause harm to it.

# 2.2.2Objectives of the Vienna convention for the protection of the Ozone layer encountering environment challenges.

There was increasing concern that the Earth's stratospheric layer that was being destroyed. The ozone layer is very important to us because it keeps out dangerous ultraviolet rays from the sun, if we keep on losing this shielding layer, we will have serious issues on human, animals and plants, the effects include cancerous mutations among other serious health issues where united Nations environment program came up with global framework to safeguard Ozone layer <sup>12</sup>.

# 3. 4 CONVENTIONS ON BIOLOGICAL DIVERSITY, NAIROBI 1992

During this convection they sent invitations to 101 countries that came to discover the requirement for international conventional on biological diversity.

### 3.4.1 Structure of the biological diversity convention

This is overseen by the Conference of the parties (COP) they are comprehensive of all governments that have ratified the treaty, what they do is to analyse and also makes reforms under the convention.

# 3.4.2 Objectives of the Convention on Biological Diversity on encountering environment challenges in Africa.

Any treaty that is signed is meant to safeguard our environment and make it sustainable, the conservation of biodiversity, where we have 190 countries and European Union is meant to guarantee the sustainable use and reasonable sharing of genetic resources. This convection Biological Diversity maintain the conservation of genetic resources by safeguarding sensitive ecosystems, rehabilitating degraded ecosystems, and enacting legislation that safeguard endangered plant and animal species, also give financial support to help in least developing countries their main work is to conserve biological diversity.

# 3.4.3 Effects of the Convention of biological diversity on encountering environment challenges.

There are the national strategies which are put forward by the member states for a sustainable environment and maintaining their ability to encounter the needs and aspiration of the current and future creation, secondly all party state should work together for safeguarding and sustain Biodiversity.

# 2.3 Mechanisms put forward to counter environmental challenges in Kenya.

Sustainable environment is meant to encounter the requirements of our future children categorized in to social economic and environment pillars .Kenya Economic and development relies on its natural resources, there is need to utilize our resources in a sustainable way by communication and training between the public and to enhance participation by all stakeholders. If all stakeholders can support and participate in the strategy in implementing sustainable

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<sup>12</sup> https://www.unenvironment.org/news-and-stories/statement/un-environment-statement-cfc-emissions

development programs and activities then we can track the strategy, a monitoring and evaluation plan can be crafted.

In this chapter, the researcher chose three mechanisms which have been put in place in Kenya, which are National Environment Management Authority, Green Belt movement and Kenya Forest research Institute in line with my objective number three which is to examine if environmental international agreements have significant effects on encountering environment challenges in Africa, where the researcher has talked about pollution, population and climate change as major challenges in environment.

## 2.3.1 National Environment Management Authority

The National Environment Management Authority is recognized in the environmental Management and Co-ordination Act No. 8 of 1999 as a tool of management for the achievement of all policies relating to environment.

# 2.3.2 National Environment Management Authority on pollution.

The main agenda was to have order in management and put rules to organize, safeguard the air pollution to make sure there is clean healthy air and lastly it provides emission standards as Coordination Act. 1999.

# 2.3.3 Education for sustainable development in Kenya by National Environment Management Authority.

In Kenya we have a big issue when it comes to sustainable development because our economy is driven by our natural recourses, once we have education we can have utilization of national, this training is a major step in our country through knowledge, capacity building programs and developing of skills in sustainable use of resources at all time.

# 2.3.4 Education for sustainable development vision in Kenya by National Environment Management Authority.

Kenya one of the on the dream is to reinforce is to teach and to attain sustainable development so that we can have better quality of life the agenda was to improve the role of teaching and knowledge for reasonable and sustainable of recourses through public awareness to enhance quality of life .

# 2.3.5 Kenya education for sustainable development implementation strategies by National Environment Management Authority.

It is important to know the reasons why we have unsustainable environment so that we can have plans to call for awareness in Kenya so that we can stay and live sustainably and support consciousness and be responsible of individual actions and see how we affect environment.

Teachings that have been set aside are for the purpose to make sure that education is for improving people ability and knowledge on public awareness to encourage good values and

behaviour towards the environment<sup>13</sup>, there is monitoring and evaluation processes so that they know if they are attaining the agendas in Kenya.

# 3.3.6 National Environment Management Authority currently situation.

Through their support, training towards sustainable development achievements ,the National Environment management authority have played a major role in sustainable environment ,the strategies which were put up in 2008 shaped the basics if coordination ,this activities are headed by the administration ,civil society organization ,private sector and the non government organizations to give consciousness to the public, advocate for participation and empower people in the community <sup>14</sup>.

### 2.3. Green Belt Movement

The great Professor Wangari Maathai formed the Green Belt Movement in 1977 because the rivers were drying up, the food supply was minimal to cater for people, and they had no firewood for cooking food they walked miles away to get firewood. Green Belt Movement help women to plant seedlings and later plant them

The professor organized education training which are called Community Empowerment and Education, those seminars enlightened the society about the human impact on environment .

## 2.3.2 Green Belt Agenda.

The agenda is to call upon the government to have a better democratic space and to take charge of our environment; the movement also prohibited land grabbing and deforestation.

### 2.3.3 Success of Green Belt Movement

In the year 2004, Professor was given an award, she worn Nobel peace price this was a big moment in Kenya where the world recognized her and she was appointed as a goodwill Ambassador for Congo Basin Forest Ecosystem. One thing about professor she believed in community work and encouraged us to safeguard our environment.

## 2.3.4 Green Belt movement on climate change

Green Belt Movement play a big role when it comes to climate change, by planting trees and they also have climate change programs that really aid in strengthening the understanding and capacity of the society to critical think and also act against climate change.

# 2.3.5 Green Belt Movement on countering sustainable environment.

Green Belt Movement play a big role when it comes to climate change, by planting trees and they also have climate change programs that really aid in strengthening the understanding and capacity of the society to critical think and also act against climate change.

### 2.4 Kenya forest research institute

The Institute is run by the government; one of their agenda is to protect natural resources in Article 6 on Devolution. We have three pillars in our 2030 Kenya vision to Development blue print and that is the Economy pillar, the social pillar which is mandated to contribute to clean and protect our environment we have forestry under this Pillar, finally the Political pillar.

<sup>&</sup>lt;sup>13</sup>National Environment Management Authority. Communication guidelines for the ASRECA based project 2010.NEMA

<sup>&</sup>lt;sup>14</sup> National Environment Management Authority 2009 Ewaste working group report. N.E.M.A.

To enhance economic development in science the Institute had to use technology and innovation as one of the tools, the institute main agenda is to do research and give information to respective departments for us to have sustainable development in forestry so that we can use natural recourses for economy development<sup>15</sup>.

### 2.4.2 Kenya forest research institute major achievements

The Institute has set up farm research programs projects tree seeds to deliver to their centres, agents that plant those seeds have also risen, and the Institute have put up industrial forest and plantation research where they watch and manage trees pests and diseases and finally accept technology when it comes to water catchments have increase partnership and networks with difference nations to share information in their data base.

## 2.4.3 Kenya forest research institute agendas

Its main work is to do research in forest and give that information to the respective authority; it also must work with other research bodies and institutions to have joint research and training aiming development.

# 2.4.4 Kenya forest research institute on climate change

The Institute play a big role, it help us to have a quality life and for our next generations to come through planning for sustainable development and also management of our book Kenya, they also contribute heavily to our green economy by putting in place national policies.

# 2.4.5 Kenya forest research institute on environment

Their top agenda is to have a improved quality of life for our children's through sustainable environment as we make use of the recourses we need to be careful to preserve our environment. Kenya forest research institute played a important position in development of the giving rules and it also contribute to innovative strategies to increase forest and for us to have a Green Economy  $^{16}$ 

### Conclusion

We can have sustainable environment in Kenya if we follow the policies that have been setup this is according to a survey by Kenya Institute of curriculum development 2013, Kenya have an understanding of sustainable development issues education sustainable development is just an abstract, networks have been established local and international level but it lack of regular forum inhibits regular and systematic change of experience therefore poor synergies. National Environment management Authority, Green belt movement and Kenya forest research institute have come up with the green point concept, centres that will provide space for monitoring and also evaluation of local innovation.

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<sup>15</sup> https://kefri.org/

<sup>&</sup>lt;sup>16</sup> https://kefri.org/PDF/Kefristrategicplan2013-2018.pdf

### **CHAPTER THREE**

# Research methodology

This study will investigate persistence of environment challenges: The role of international agreements in Africa.

### 3.1 Research Design

Mixed methods will be carried out in this study that is the qualitative method and the quantitative method and then data collection will be done through questionnaire.

## 3.2 Sampling Techniques

This will be the methodology through which selection of samples from the larger group will be made. These individuals are taken to be representative from the larger population from which they have been selected. The techniques adopted by the study will be cluster sampling. The use of this technique is to overcome the issue of obtaining a case frame as the overall people is huge and distributed over an area with a larger geographical extent.

### 3.3 Data Collection Procedure

Two main methods will be used in the collection of primary data. These are:

Qualitative research, this will be achieved through interviews, one on one interactions between the researcher and subject as the researcher uses an interview schedule, this will help to go beyond the statistics results reported in quantitative research because the research will get the actual felling on the ground and emotions.

Quantitative research methods to measure produce discreet, numerical or quantifiable data through appropriate research designs and techniques.

### 3.4 Data Collection Instruments

The research will develop instruments which will help to collect necessary information *Questionnaires* 

The study will make use of 100 structured as well as closed ended questionnaires. Each questionnaire will contain 26 questions. Items in the questionnaire are developed to address the research questions and objectives proposed by the researcher.

#### Interviews.

Oral administration of a questionnaire, it will be face to face interviewed and it will be structured interview to meet the Study objectives.

Online journals, newspapers and international news.

### 3.5 Data Analysis

This Section entails scrutinizing the data collection as well as drafting it. The collected data will be entered into computers for further analysis. There will be data coding, data entry and common statistical procedures used in data analysis.

### 3.6 Ethical Consideration

A letter from supervisor with a stamp from the department to carry out the research will be obtained. The same will assist in data collection.

## 3.7 Limitation and Assumption

Time: The study will require a lot of time for data collection and analysis.

Money: Money will be needed for food, transport and printing paper.

Access: There will be need to access some organizations, access to environmental documents in environment organization, access people, and access to information.

### 3.8 Assumption of the Study

For this study, it is assumed that effective planning is in place to avoid rise of environment issues in Africa and to strive for sustainable environment.

## 3.9 Scope of the Study

The project will be concluded in the shortest time possible with the help of funds allocation, time availability and letter from the University.

### 3.10 locations

The location of the research will be in Nairobi, Kenya.

# 3.11 Sample Population

Pollution is well precise and to the point as a set of individual's case with collective noticeable characteristics as the researcher generalize the results of the Study.

The sample will be selected from: Students at university of Nairobi, Kenya Broadcasting cooperation, United Nations official, Signet Kenya and Radio Africa limited.

### **CHAPTER FOUR**

### **Dataanalysis**

# **Demographic characteristics**

# Age

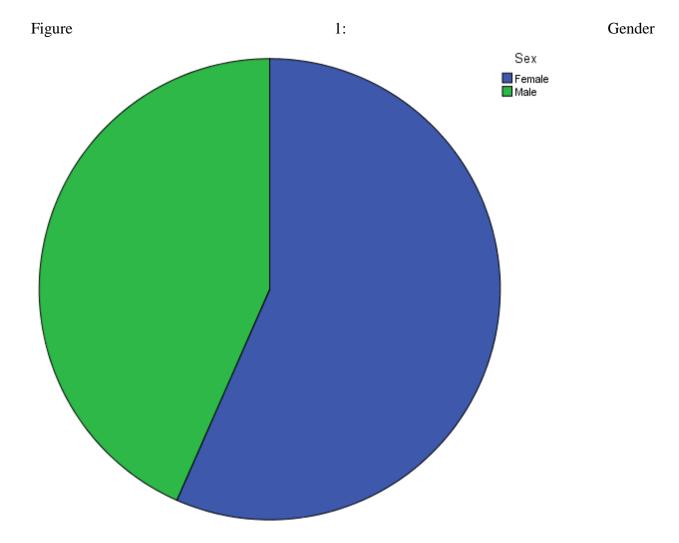
As shown in table 1, about fifty-seven percent of the respondents were less than thirty years of age. The respondents between the ages of thirty-one to forty were 22%. Those in the age group of forty-one to fifty years it was 19.8%. There was no respondent above the age of fifty-one years.

Table 1: Age

	Frequency	Percent
Less than 30	61	57.5
31-40 yrs	24	22.6
41-50 yrs	21	19.8
Total	106	100.0

# Gender

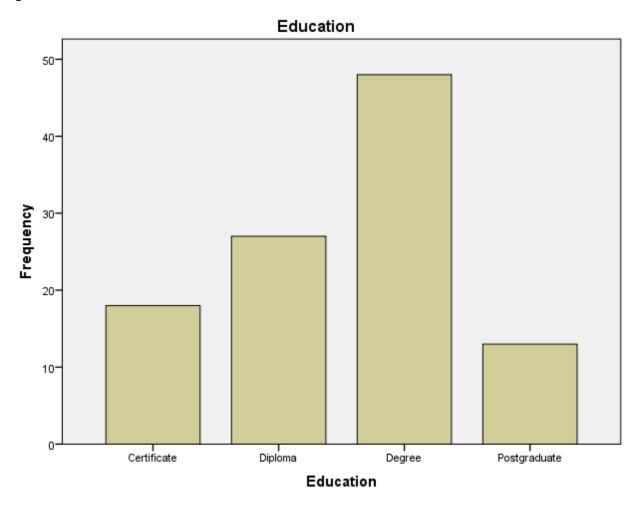
Female constituted a majority of the respondents. As shown in figure 1, female constituted about 56.6%. The male respondents constituted 43.4% of the respondents.



# Education

Those with a certificate as they minimum qualifications as shown in figure 2 were 17.8% of the total number of respondents. The once with diploma qualification were found to be 25.5%. Those with degree qualification were found to be 45.3% of the total number of respondents. Those with postgraduate qualification were about 13% of the respondents.

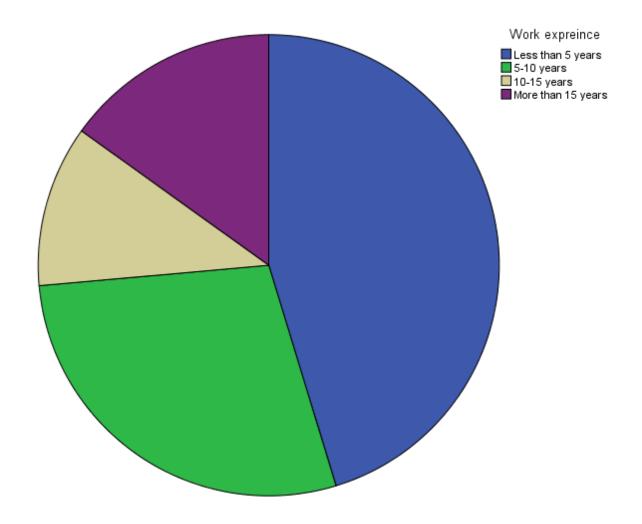
Figure 2: Education



# Work experience

The respondents with less than five years of work experience were 45.3%. Those with experience between five years to ten years were 28.3%. The respondents with work experience of between ten years to fifteen years were 11.3%. The one with experience of greater than 15 years were found to 15.1%.

Figure 3: Work Experience



### **Survey Question**

Persistence of Environmental Challenges in Africa

The respondents were asked whether human activity has an impact on the environment that affects human progress. All the respondents indicated that they agreed that human activities had a role to play on the environment. The human activity that affects the environment includes overconsumption, human reproduction, pollution, overexploitation, and deforestation. The major environmental issues found in the survey included global warming, environmental degradation, and mass extinction and lose in the biodiversity.

The government has various programs that help to solve environmental problems. The respondents were asked if the government should increase the debate, training, and program to reduce natural calamities. It was found that 97.2% of the respondent indicated yes while 2.8% indicated no. the respondent agreed that environmental issues are increasing with more than 94% agreeing and 5% denying. The environmental issues were also identified to affecting international relations. The participation of the public was identified as important for management of the environment. It is because more than 90% of the respondent agreed while those who disagree were only 10%. The use of technology was identified to help to manage the

environment in Africa. It is because about 95% of the respondents agreed while less than 5% disagreed.

## **Environmental International Agreements**

The respondents were asked whether international agreements help to resolve environmental issues. About 81% of the respondent indicated that the international agreements help to resolve environmental issues. The respondent who indicated that international agreement does not help to resolve environmental issues were 15%. About 94% of the respondents indicated that solving environmental issues helps to ensure stability while only 5% of the respondents indicated that solving environment issues reduce conflict and ensures conflict.

The respondent indicated that there is a need to revise the prediction of the population using the available data. More than 90% of the respondent agreed while 10% disagreed. The respondent also agreed that the government should regulate the export, importation, and transportation of endangered wildlife species skins and trophies. The need for research onenvironmental issues was identified by the respondent with more than 80% agreeing. The respondent who indicated that the public should be concerned with transportation, collections, and disposal of waste was more 80%. The respondents recommended that the government should implement penalties to make the environment suitable.

# How Environmental International Agreements Have Impact in Encountering Environment Challenges in Africa

The respondents were asked if the international agreement had a role in encountering environmental problems. The respondent strong agreed that the government should impose strong fines on the member states that do not adhere to international agreements. It was also identified that the government should limit human activities to protect the environment. The respondent also strongly agreed that the public should be taught how to enable environmental sustainability. The respondent strongly agreed that the international environmental agreements are put in place to make sure that there is peace in Africa. The government was asked to support the program of solving environmental problems. The international agreements were found to have a huge impact on encountering environment issues in Africa.

# Mechanisms Put Forward By NEMA, Green Belt Movement, and KFRI to Have Sustainable Environment in Kenya

The respondent strongly agreed that reforms have been effective in reducing environment issues in Kenya. The need for greater reforms to be put in place to ensure the sustainable environment was required. Involving the public in the fight for environmental sustainability was identified. NEMA, KFRI and Green Belt movement was needed to solve the environmental issues by increasing their education on the public. The respondent strongly agreed that Kenyan were of environmental issues and the improvement of NEMA, Green Belt Movement and KFRI in solving environmental issues.

#### Discussion

Many nations have suffered from a change in the environment like an increase in the sea level, alternation in the hydrological cycle and bad weather situation. Nevertheless, the activities of human have severe negative effects on the environment that influence livelihood (Mahmoud Gan, 2018). The finding of the role of human activity in the environment is similar to the present study. Researches on land use and climate change have found that human activities have impact ecosystem and the environment at various scales (Tong, Sun, Ranatunga, He and Yang, 2012; Reeves, Manning, DiBenedetto, Palmquist, Lauenroth, Bradford, and Schlaepfer, 2018). Human activities that have led to great environment changes include land use change and deforestation. The excessive application of water for agricultural use and domestic needs have led to the depletion of the resource. Human activities have also led to depletion of groundwater that has been formed over centuries in the environment. The regions that previously experienced heavy rain and had a large cover of forest and scrubland have lost them to human activities.

While trying to mitigate the effects of severe drought, rise in the population and have food security rainwater harvesting dams have been developed in mountain regions and forest area converted into agricultural fields. Wild animals have also been hunted for food and other valuables Africa. Extensive use of land has been identified to be the factors to increase the loss of biodiversity, reduction in the habitat, fragmentation and food security (Nasser, Al-Ahmed, Ansari, Shobrak, 2015; Liang, Zhong, Zeng, Chen, Hua, Li, Yuan, Wu and Gao 2017). The failure to watch human activity was found to have the potential of leading to irreversible losses in the environment. The finding of the present study about the role of human activities on the environment is similar to previous researches.

An environmental issue in Africa have been found to be due to anthropogenic effects the natural environment of Africa and have an effect on human and almost all kind of endemic life. The environmental issues in Africa comprise access to clean water, desertification and population explosion (Keeley and Scoones, 2014). The findings are similar to a present study that found that African environmental issues to comprise of deforestation and global warming. In the Africa continent, the main environmental concern is cutting down trees. There is a lot of tree cutting and conversion of land for agricultural application in Africa. About ninety percent of African use wood for fuel in cooking and other heating activities. It leads to reduce the proportion of forest area in the area day by day.

Negative climate change is in the rise,however, Africa has not contributed greatly to the change but have been the most affected. In a sub-Saharanregion, more than 180 million will feel the impact of climate changes on them. It is thus very important for Africa to handle the impact of climate change (Keeley and Scoones, 2014). Africa must be in the front sit in the energy revolution to solve the problems of climate change. The structural adjustment programs of the World Bank and IMF have increased the demand for timber. The demand has been fed to logging of timber. The traditional methods of cultivation that common practice in Africa also contributes to the destruction of the environment. The method involves burning that destroys

weeds, seeds and reduces the soil into the finer structure (Keeley and Scoones, 2014). Deforestation also leads to soil erosion because the trees hold the soil together.

The government is in the best position in the protection of the environment. The rise in environmental changes has led to governments adopting sustainable development. The changes in different biodiversity have increased around the globe. It is found that various international conventions and treaties have tried to environmental issues (ÖlundWingqvist, Drakenberg, Slunge, Sjöstedt and Ekbom, 2012). The finding is similar to the present study that found that the government has a role in solving the problems in the environment. The government as the policymaker has a crucial role to conserve and prevent the pollution of the environment. The different authorities of the government are urges to enforce a policy that help to conserve the environment.

However, even with the imposition of laws and policies that conserves the environment (ÖlundWingqvist, Drakenberg, Slunge, Sjöstedt and Ekbom, 2012). There is a conflict between nature and humans particular in the rural locations. The government is required to be cautious with the international bodies that come to assist them to conserve the environment. It should determine if those bodies love nature or have other motives and prevent the loss in their sovereignty. The government has many responsibilities to ensure the protection of the environment. The current study identified training, debates, and programs that protect the environment as one of the methods to protect the environment.

The changes in the environment have the highest impact on the people living in poverty. It is due to their high dependence on natural resources, vulnerability and the inability to cope with changes in the environment like droughts and floods (ÖlundWingqvist, Drakenberg, Slunge, Sjöstedt and Ekbom, 2012). The poor are at risk of the unsanitary surrounding, marginal land, and high-risk vocation. The environmental issues are rising and affect the development of humans. This finding of the rise in environmental change is similar to the present study. The environment is degraded everybody by human activities. The protection of the environment using mainstream environment plans and legislation is very important for the progress of humanity, reducing poverty and ensuring the growth of the economy. The role of government in environmental protection is by mainstream development and legislation.

The conservation of the environment has a greater impact on gender equality. It is because women in African have a higher dependence on the common resources and can be vulnerable to the bad effects of destruction of the natural resources (ÖlundWingqvist, Drakenberg, Slunge, Sjöstedt and Ekbom, 2012). Various multinational environment agreements recognize how it is important to manage the environment. Sustainable progress is partially is dependent on legal structure, policy and institutional framework. The main problem in Africa is that the laws are in place but not properly implemented (ÖlundWingqvist, Drakenberg, Slunge, Sjöstedt and Ekbom, 2012). The reason for not implementing the laws properly is due to lack of proper technical and financial ability in Africa.

The present study found that public participation is important in the implementation of environmental policies. According to Héritier (2010), it is important for the free and unrestricted

participation of the public whiling making decisions. It supports the concept of involving of citizens in the creation of legislation and the management of resources. The importance of public participation was also found in the present study. Public participation helps to reduce conflict and increase the acceptance of the project. In the preparation of conversation programs, the involvement of the public is one of the main elements. The basic reason for public participation is for the promotion social and political program of the society (Héritier, 2010). The participation reduces the tension that may come due to divergent interest in from the various stakeholders. It helps to resolve the issue of power and decision-making. The participation of the public in environmental conversation is very important.

The present study analysed the role of technology in solving environmental issues. Ironically it was found that technology has the ability to solve environmental issues that are caused by technology. In the last one hundred years, it is estimated that the temperature of the earth has increased with more 1.4 degrees (Héritier, 2010). The rise in temperature is attributed to the rise in industrialization and human activity. The environmental issues are complex and need solutions that are also complex. Just like technology has improved the lives for humans it has the ability to improve the environment. The replacement of old technology that pollutes the environment with one that is sensitive on the environment can help to improve the surrounding (Héritier, 2010). For instance, the waste from animals is a major cause of water pollution in Africa. However, the waste can be used as an alternative source of energy and reduce deforestation.

The present study sought to determine the role of international environmental agreements in solving environmental issues. The findings indicate that international agreements are very important in solving environmental problems. According to Lafferty (2004), the international environmental agreements show the main policies of the government on key environmental problems. The agreements have various objectives to solve the problems in the environment (Lafferty, 2004). The government is able to determine the actual environment results against the excepted results due to international agreements.

Addressing the environment issues also helps to reduce conflict and ensure stability as identified in the present study. The weather, water, and air of the globe are interconnected. Human activities that utilize the natural resources are thus interrelated specifically transport and communication (Tietenberg and Lewis, 2016). The international environmental agreement gives a guideline on how the natural resources will be utilized. Competition for the resources is reduced due to an international environmental agreement that ensures peace in the globe (Tietenberg and Lewis, 2016). International environmental agreements indicate that various nations have similar interest that requires to be addressed. The agreements are either between nations or using the used United Nations (Tietenberg and Lewis, 2016). The world faces various pollutions and pollutions from one nation may influence itsneighbors or the whole world. The international agreements are needed to prevent the effects for such pollution on the neighboring countries.

The current study found that the government has a responsibility to regulate the export of endangered wildlife. International trade in wildlife is very profitable. It consists of the biggest world trade. The regulation of export in of endangered wildlife will help to conserve them and reduce the possibility of their extinction (James, 2014). The public is supposed to be at the forefront of environmental conservation as identified by the present study. The participation of the public in the disposal of waste helps to reduce the work for the government in waste management. To make the environment sustainable it was identified that the use of energy in the household should reduce. Recycling of items can also help to ensure sustainability in the environment. It also reduces wastage and the level of pollution in the environment. The saving water was also identified as a method of ensuring sustainability in the environment.

The National Environmental Management Authority (NEMA) helps in the coordination of various environmental management activities that are conducted by key agencies. It also enhances the integration of environment in the development policies, programs and plans with the objective to ensure good management of the environment. The Green Belt Movement is a non-governmental organization that participates in the conservation of the environment. In Kenya, the movement has planted more 50 million trees (Mohanan and Kerala Forest Research Institute, 2011). The body works at the grassroots, national and international levels in the promotion of the conservation of the environment. The Kenya Forest Research Institute is a multidisciplinary body in charge of research on forestry and tropical forest. The studies have enhanced research on conservation of biodiversity and forestry.

#### **Discussion**

Many nations have suffered from a change in the environment like an increase in the sea level, alternation in the hydrological cycle and bad weather situation. Nevertheless, the activities of human have severe negative effects on the environment that influence livelihood (Mahmoud Gan, 2018). The finding of the role of human activity in the environment is similar to the present study. Researches on land use and climate change have found that human activities have impact ecosystem and the environment at various scales (Tong, Sun, Ranatunga, He and Yang, 2012; Reeves, Manning, DiBenedetto, Palmquist, Lauenroth, Bradford, and Schlaepfer, 2018). Human activities that have led to great environment changes include land use change and deforestation. The excessive application of water for agricultural use and domestic needs have led to the depletion of the resource. Human activities have also led to depletion of groundwater that has been formed over centuries in the environment. The regions that previously experienced heavy rain and had a large cover of forest and scrubland have lost them to human activities.

While trying to mitigate the effects of severe drought, rise in the population and have food security rainwater harvesting dams have been developed in mountain regions and forest area converted into agricultural fields. Wild animals have also been hunted for food and other valuables Africa. Extensive use of land has been identified to be the factors to increase the loss of biodiversity, reduction in the habitat, fragmentation and food security (Nasser, Al-Ahmed, Ansari, Shobrak, 2015; Liang, Zhong, Zeng, Chen, Hua, Li, Yuan, Wu and Gao 2017). The failure to watch human activity was found to have the potential of leading to irreversible losses

in the environment. The finding of the present study about the role of human activities on the environment is similar to previous researches.

An environmental issue in Africa have been found to be due to anthropogenic effects the natural environment of Africa and have an effect on human and almost all kind of endemic life. The environmental issues in Africa comprise access to clean water, desertification and population explosion (Keeley and Scoones, 2014). The findings are similar to a present study that found that African environmental issues to comprise of deforestation and global warming. In the Africa continent, the main environmental concern is cutting down trees. There is a lot of tree cutting and conversion of land for agricultural application in Africa. About ninety percent of African use wood for fuel in cooking and other heating activities. It leads to reduce the proportion of forest area in the area day by day.

Negative climate change is in the rise, however, Africa has not contributed greatly to the change but have been the most affected. In a sub-Saharanregion, more than 180 million will feel the impact of climate changes on them. It is thus very important for Africa to handle the impact of climate change (Keeley and Scoones, 2014). Africa must be in the front sit in the energy revolution to solve the problems of climate change. The structural adjustment programs of the World Bank and IMF have increased the demand for timber. The demand has been fed to logging of timber. The traditional methods of cultivation that common practice in Africa also contributes to the destruction of the environment. The method involves burning that destroys weeds, seeds and reduces the soil into the finer structure (Keeley and Scoones, 2014). Deforestation also leads to soil erosion because the trees hold the soil together.

The government is in the best position in the protection of the environment. The rise in environmental changes has led to governments adopting sustainable development. The changes in different biodiversity have increased around the globe. It is found that various international conventions and treaties have tried to environmental issues (ÖlundWingqvist, Drakenberg, Slunge, Sjöstedt and Ekbom, 2012). The finding is similar to the present study that found that the government has a role in solving the problems in the environment. The government as the policymaker has a crucial role to conserve and prevent the pollution of the environment. The different authorities of the government are urges to enforce a policy that help to conserve the environment.

However, even with the imposition of laws and policies that conserves the environment (ÖlundWingqvist, Drakenberg, Slunge, Sjöstedt and Ekbom, 2012). There is a conflict between nature and humans particular in the rural locations. The government is required to be cautious with the international bodies that come to assist them to conserve the environment. It should determine if those bodies love nature or have other motives and prevent the loss in their sovereignty. The government has many responsibilities to ensure the protection of the environment. The current study identified training, debates, and programs that protect the environment as one of the methods to protect the environment.

\The changes in the environment have the highest impact on the people living in poverty. It is due to their high dependence on natural resources, vulnerability and the inability to cope

with changes in the environment like droughts and floods (ÖlundWingqvist, Drakenberg, Slunge, Sjöstedt and Ekbom, 2012). The poor are at risk of the unsanitary surrounding, marginal land, and high-risk vocation. The environmental issues are rising and affect the development of humans. This finding of the rise in environmental change is similar to the present study. The environment is degraded everybody by human activities. The protection of the environment using mainstream environment plans and legislation is very important for the progress of humanity, reducing poverty and ensuring the growth of the economy. The role of government in environmental protection is by mainstream development and legislation.

The conservation of the environment has a greater impact on gender equality. It is because women in African have a higher dependence on the common resources and can be vulnerable to the bad effects of destruction of the natural resources (ÖlundWingqvist, Drakenberg, Slunge, Sjöstedt and Ekbom, 2012). Various multinational environment agreements recognize how it is important to manage the environment. Sustainable progress is partially is dependent on legal structure, policy and institutional framework. The main problem in Africa is that the laws are in place but not properly implemented (ÖlundWingqvist, Drakenberg, Slunge, Sjöstedt and Ekbom, 2012). The reason for not implementing the laws properly is due to lack of proper technical and financial ability in Africa.

The present study found that public participation is important in the implementation of environmental policies. According to Héritier (2010), it is important for the free and unrestricted participation of the public whiling making decisions. It supports the concept of involving of citizens in the creation of legislation and the management of resources. The importance of public participation was also found in the present study. Public participation helps to reduce conflict and increase the acceptance of the project. In the preparation of conversation programs, the involvement of the public is one of the main elements. The basic reason for public participation is for the promotion social and political program of the society (Héritier, 2010). The participation reduces the tension that may come due to divergent interest in from the various stakeholders. It helps to resolve the issue of power and decision-making. The participation of the public in environmental conversation is very important.

The present study analysed the role of technology in solving environmental issues. Ironically it was found that technology has the ability to solve environmental issues that are caused by technology. In the last one hundred years, it is estimated that the temperature of the earth has increased with more 1.4 degrees (Héritier, 2010). The rise in temperature is attributed to the rise in industrialization and human activity. The environmental issues are complex and need solutions that are also complex. Just like technology has improved the lives for humans it has the ability to improve the environment. The replacement of old technology that pollutes the environment with one that is sensitive on the environment can help to improve the surrounding (Héritier, 2010). For instance, the waste from animals is a major cause of water pollution in Africa. However, the waste can be used as an alternative source of energy and reduce deforestation.

The present study sought to determine the role of international environmental agreements in solving environmental issues. The findings indicate that international agreements are very important in solving environmental problems. According to Lafferty (2004), the international environmental agreements show the main policies of the government on key environmental problems. The agreements have various objectives to solve the problems in the environment (Lafferty, 2004). The government is able to determine the actual environment results against the excepted results due to international agreements.

Addressing the environment issues also helps to reduce conflict and ensure stability as identified in the present study. The weather, water, and air of the globe are interconnected. Human activities that utilize the natural resources are thus interrelated specifically transport and communication (Tietenberg and Lewis, 2016). The international environmental agreement gives a guideline on how the natural resources will be utilized. Competition for the resources is reduced due to an international environmental agreement that ensures peace in the globe (Tietenberg and Lewis, 2016). International environmental agreements indicate that various nations have similar interest that requires to be addressed. The agreements are either between nations or using the used United Nations (Tietenberg and Lewis, 2016). The world faces various pollutions and pollutions from one nation may influence itsneighbors or the whole world. The international agreements are needed to prevent the effects for such pollution on the neighboring countries.

The current study found that the government has a responsibility to regulate the export of endangered wildlife. International trade in wildlife is very profitable. It consists of the biggest world trade. The regulation of export in of endangered wildlife will help to conserve them and reduce the possibility of their extinction (James, 2014). The public is supposed to be at the forefront of environmental conservation as identified by the present study. The participation of the public in the disposal of waste helps to reduce the work for the government in waste management. To make the environment sustainable it was identified that the use of energy in the household should reduce. Recycling of items can also help to ensure sustainability in the environment. It also reduces wastage and the level of pollution in the environment. The saving water was also identified as a method of ensuring sustainability in the environment.

The National Environmental Management Authority (NEMA) helps in the coordination of various environmental management activities that are conducted by key agencies. It also enhances the integration of environment in the development policies, programs and plans with the objective to ensure good management of the environment. The Green Belt Movement is a non-governmental organization that participates in the conservation of the environment. In Kenya, the movement has planted more 50 million trees (Mohanan and Kerala Forest Research Institute, 2011). The body works at the grassroots, national and international levels in the promotion of the conservation of the environment. The Kenya Forest Research Institute is a multidisciplinary body in charge of research on forestry and tropical forest. The studies have enhanced research on conservation of biodiversity and forestry.

#### **CHAPTER FIVE**

#### Findings, conclusions and recommendation

During my study, I had three objectives which were; to investigate the reasons why environment challenges are difficult to solve in the world as we have seen through the research environment challenges are increasingly affecting national security policy and international relations.

To examine if international agreements have significant effects on encountering environment challenges in Africa, where we looked at International agreements and later analysed three international agreements which are convention on Biodiversity, United Nation framework Convention on climate change and finally the convention on Ozone layer.

My final objective was to critically examine implementation put forward by National Environment Management to have sustainable environment in Kenya. This was important because we see how the government has set out plans to deal with environment challenges.

My focus of the study was based on persistence of environmental challenges in Africa and what role do international agreements play when it comes to solving increasingly environment challenges. The investigation was conducted in; Nairobi city council environment department, signet Kenya, Kenya broadcasting corporation, Radio Africa and finally the United nations in Nairobi it was done in October-November 2018.

During the research, I used both mixed methods that were the qualitative method and the quantitative method and then data collection was done through questioner. The research data was gathered through questioner, interviews, online journals, newspapers and international news.

The respondents were chosen according to where they work the environmentalists in environment department at university of Nairobi and United Nations environment officials. The researcher used sampling techniques, cluster sampling because it was not possible to obtain sampling frame, the population was large and scattered over a large geographical area.

#### **Conclusions and Recommendations**

#### 5.1 Conclusions

The first objective aimed at determining the level of persistence in the international agreements. From the results, it is revealed that human activity impacts the environment that affects human progress. These activities of human beings that usually have an impact on the environment included overconsumption, human reproduction, pollution, overexploitation, and deforestation. Besides, from the results, it is noted that when environmental issues such as global warming, environmental degradation, mass extinction and lose in the biodiversity are addressed, it leads to easing of the international conflicts and secure stability. The resources that are available regarding the persistence of international agreements are few, and this implies that there is a need for revising of the population predictions of existing data. Also, from the research, it is found out that the government should regulate the export, transportation, and importation of endangered wildlife species skins and trophies. These findings indicate that international agreements help to solve environmental issues. Thus, it can be concluded that environmental issues may be solved through international agreements.

Furthermore, from the study, it was found out that the international agreement had a role in encountering of the environmental problems in Africa. This was shown by the respondents strongly agreeing that the government should impose strong fines on the member states that do not adhere to international agreements. The study found out that the government was required to limit human activities as a way of protecting the environment as well as the public to be taught on how to enable environmental sustainability. From the findings, it was shown that there were international environmental agreements that had been put in place to make sure that there is peace in Africa. This was supported by the government being asked to support the programs of solving environmental problems. This was because the international agreements had a huge impact on encountering environment issues in Africa. Thus, it is concluded that environmental international agreements have an impact in encountering environment challenges in Africa through the strong fines imposed by the governments on the member states that do not adhere to international agreements as well as the government limiting on human activities for purposes of protecting the environment.

The last objective for the study sought to establish the mechanisms put forward by NEMA, Green Belt Movement, and KFRI to have a sustainable environment in Kenya. From the findings, it is established that reforms have been effective in reducing environment issues in Kenya and there was also a need for greater reforms to be put in place to ensure a sustainable environment. There is a need for the public in the fight for environmental sustainability as well as NEMA, KFRI and Green Belt movement are needed in the process of environmental issues. The study found out that NEMA, KFRI and Green Belt was increasing on the education of the public as a way of involving the public in the fight against environmental challenges. From the results, it is shown that Kenyans are aware of environmental effects and this is the reason as to why NEMA, Green Belt Movement, and KFRI are in the front line in solving environmental challenges in Kenya. All these are the mechanisms that have been employed in order to ensure

that there is sustaining of the environment. Hence, it can be concluded that the mechanisms put forward by NEMA, Green Belt Movement, and KFRI to have a sustainable environment in Kenya include educating the public as well as involving them in the fight against environmental challenges.

#### **5.2 Limitations**

This research study employed primary data as well as secondary sources such as journals in the collection of data to be used in the research. The sources of data used in the research have some limitations that may have an influence on the outcomes of the study. First, the use of various past research studies having information on the persistence of environmental challenges in Africa and the role of international agreements may lead to obtaining information that is notup-to-date. This interferes with the conclusions as well as the results that may be generated by the researcher from the field. Also, through the use of secondary sources in a research for purposes of integrating it with the primary data may be time-consuming. This is because the researcher is forced to spend a lot of time looking for information that is relevant to the topic that is under review.

Concerning the use of primary data in the study, the researcher experienced some challenges that may have an effect on the results obtained from the data gathered from the field. First, the sample size used by the researcher might have been small. This may interfere with the overall conclusions that are drawn from the selected sample for the study. Also, some difficulties are experienced when determining the type of sample size as well as the attributes of the sample to be used in the study. This may lead to the researcher taking a lot of time to establish the required sample for investigation on the on the persistence of environmental challenges in Africa and the role of international agreements. Finally, the sampling technique that is used by the researcher in the selection of the participants for the study may interfere with the overall outcome of the study. This is because every technique in research has its own merits as well as demerits.

#### **5.3 Recommendations**

Usually, in a research process, recommendations are given based on the various limitations that the research tends to have. For instance, in case there is the use of a small sample size can lead to the recommendation of increasing on the sample. This is because the use of a larger sample size may result in the generation of findings that are more accurate as compared to those of a small sample size. Thus, the recommendations for this study are as a result of the challenges that were experienced by the researcher in the process of collecting data as well as determining the results for the study.

From the study, it was found out that there are several mechanisms that NEMA, Green Belt Movement, and KFRI can put forward in order to have a sustainable environment. Thus, this study recommends that the organizations such as NEMA, Green Belt Movement, and KFRI should ensure that the mechanisms put in place for a sustainable environment are effective. Also, from the study environmental international agreements have an impact in encountering environment challenges in Africa through the strong fines imposed by the governments on the

member states that do not adhere to international agreements. Therefore, this study recommends that member states should adhere to international agreements to ensure that there is a sustainable environment.

#### 5.4 Suggestions for Further Research

Due to the limitations experienced by in the research, the study recommends that there is a need for a further research to be carried out on the comparison of the persistence of environmental challenges across the globe. Besides, the sample size used in the study might have been small, thus, the research recommends for a further study on the persistence of environmental challenges and increasing on the sample size. This will lead to the generation of results that may be more accurate as the sample size used is larger in size. Lastly, there is a need for a further research on the impact of international agreements n sustainable environment.

#### **CHAPTER SIX**

#### APPENDICES.

Background information.

Environmental issues have been a major concern for so many years yet, some of the problems have not been resolved because our environment is dynamic and mankind is having an increased effect on our planet ecosystems. Human activities are the main cause of environment problems. The nature and magnitude of the environmental challenges have mounted since the 19th century.

.

The United Nations has been at the heart of the struggle over the future of the earth's environment. Global conferences and intergovernmental policy bodies especially the commission on sustainable development, there have been forces for greater environmental protection and forces against this from those who oppose rules and regulations in the name of free markets and economic growth.

Appendix I Introduction letter to participants.

Good morning/Afternoon Sir/ Madam.

This is an academic research which investigates persistence of environmental challenges in Africa: the role of international agreements.

This questionnaire will take five minutes to complete

Thank you.

# Appendix II Questionnaire or interview guide

Part A	
I .Instructions.	
Tick in the box	below, each response as appropriate or specify by filling in the blanks provided.
Demographic d	ata.
1.Name	(Optional)
2.What is your	age?
Less than 30	( )
31 -40	
40-50	( )
3.What is your	gender?
Female	
Male	( )
4. What is your	highest education qualification?
Certificate	( )
Diploma	( )
Degree	( )
Postgraduate	( )
4. How long ha	ve you worked in your organization
Less than 5 yea	rs ( )
5-10	( )
10-15	( )

More than 15 years ( )
5.Email address( Optional).
Part B.
Please indicate your level of agreements or disagreement with each of these statements regarding persistence of environmental challenges in Africa. Place an "X" or mark in the box for your answer.
Do you agree with the following statement in regarding to environmental challenges in the Africa?
1. Do you believe that human activities have an impact on environment thus affecting human development?
Yes ( ) No ( )
2. Kindly state three major environmental problems that we are facing in Africa?
a
b
c
3. Should the government prepare more programs, debates and training to prevent national calamities?
Yes ( ) No ( )
4. Environmental issues are increasing and they are affecting international relations?
True ( ) false ( )
5. Public participation is important when it comes to environment management?
Yes () No()
6. The use of new technology can help to solve environment challenges in Africa?
True ( ) false ( )

Part	C
ıaıı	C.

Instructions .please tick in the box below, each response as appropriate or specify by filling in the blanks provided.

Do you agree with the following statement in regarding environmental international agreements?

1. Do international agreements help to solve environment issues?

Yes ( ) No ( )

2. When environmental issues are addressed we ease international conflicts and secure stability?

True ( ) false ( )

3. The resources are few, there is need for Population predictions to be revised in the view of existing data.

True ( ) false ( )

4. Shouldthe government regulate export, transportation and importation of endangered wildlife species skins and trophies?

Yes ( ) No ( )

5. Should more research be done by scholars to predict climate change?

Yes ( ) No ( )

6. Should the public be concerned about the collection, transportation and final disposal of their waste?

Yes ( ) No ( )

7. What could we do to make our environment sustainable?

\_\_\_\_\_

Part d

Tick in the box below, each response as appropriate or specify by filling in the blanks provided.

Do you agree with the following statement in regarding environmental international agreements if they have significant effects on encountering environment challenges in Africa?

1. Does International agreements play a major role in encountering environment issues?

Yes ( )

No ( )

Questions	Strongly	Agree	Neutral	Disagree	Strongly Disagree
Questions	Agree	119100	1 (Outra)	Bisagree	
The government					
should have strong					
fines to member state					
who do not adhere to					
international					
agreements					
The government					
should limit human					
activities within					
Africa boarders to					
protect the					
environment.					
The public should be					
taught ways to					
enhance					
environmental					
sustainability.					
Environmental					
International					
Agreements are put in					
place to ensure there					
is global peace in					
Africa					
The government need					
to fully support					
environmental					
programs					
implemented to solve					

environment			
challenges in Africa.			
International			
agreements have			
significant effects on			
encountering			
environment			
challenges in Africa.			

Part E

To what extent do you agree with the following statements regarding mechanisms put forward by NEMA,Green Belt Movement andKFRIto have sustainable environment in Kenya.

	Strongly	Agree	Neutral	Disagree	Strongly
	Agree				Disagree
The reforms have					
been effective in					
curbing					
environment					
challenges in					
Kenya?					
more reforms be					
put in place to					
have sustainable					
environment					
The public					
involved in the					
fight against					
environment					
challenges					
Kenyans are					
aware of					
environmental					
effects.					
NEMA, Green					
Belt Movement					
and KFRI are in					
the front line in					
solving					

environment			
challenges in			
Kenya.			
NEMA, Green			
Belt movement			
KFRIspearheaded			
development on			
education for			
sustainable			
environment			

#### Part F

Closed ended interview.

Nairobi City county interview on environment.

- 1. What is the Nairobi County doing about persistence of environmental challenges?
- 2. Are there provisions on issues to do with operation and maintenance put up to ensure environment problems are addressed?

the public participate in clean up like the way the Green Belt Movement and ministry of information does?

- 4. The mechanism put forward by NEMA, Green Belt Movement, Nairobi city council and international agreements working on encountering environment challenges?
- 5. Is there any budget put aside by Nairobi city council on collection transportation and final disposal of the waste material?
- 6. Do you strongly believe that human activities lead to National calamities?
- 7. What is the Nairobi county doing about the cutting down of trees?
- 8. What is the main reason behind "My waste, my responsibility" and the garishajiji initiative?
- 9. Any advice to the public.

Thanks you for sharing your thoughts with me and agreeing to take this questionnaire, the reason for this research is to collect opinions from the public especially those under environment sector to ensure environment challenges are addressed.

All the answers you have provided will be kept confidential. The data will be reported in a summary fashion and will not identify any individual person.

Thank you so much.

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#### **Statistics**

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# **Frequency Table**

## Age

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Less than 30	61	57.5	57.5	57.5
	31-40	24	22.6	22.6	80.2
	41-50	21	19.8	19.8	100.0
	Total	106	100.0	100.0	

## Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	60	56.6	56.6	56.6
	Male	46	43.4	43.4	100.0
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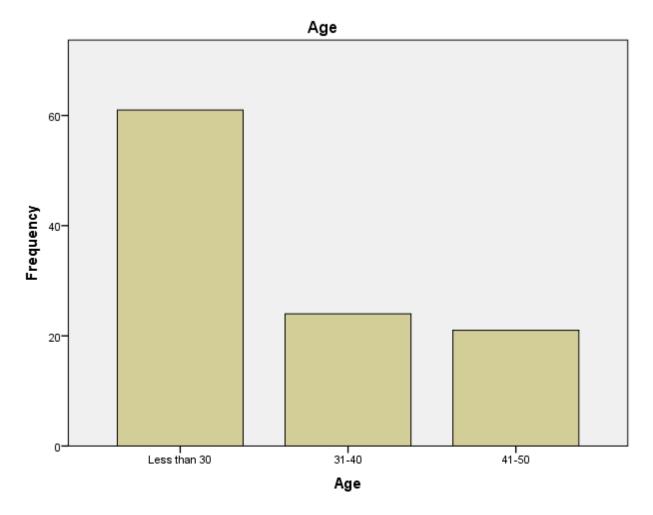
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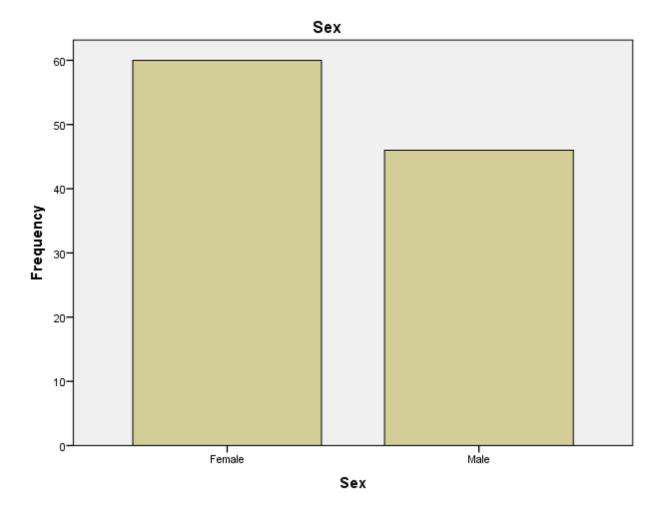
_					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Certificate	18	17.0	17.0	17.0
	Diploma	27	25.5	25.5	42.5
	Degree	48	45.3	45.3	87.7
	Postgraduate	13	12.3	12.3	100.0
	Total	106	100.0	100.0	

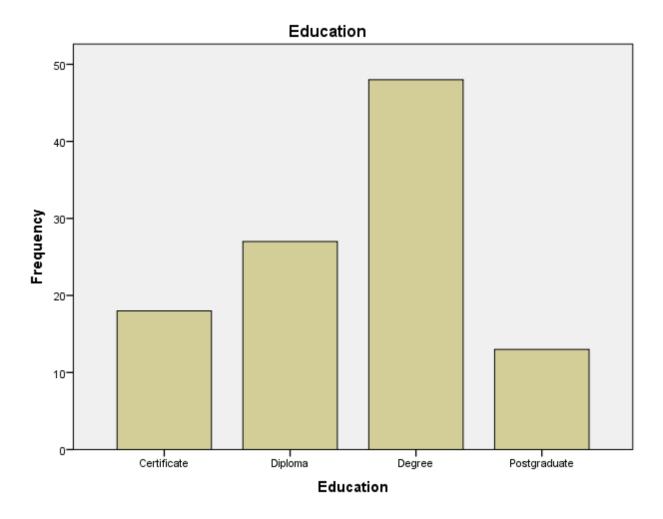
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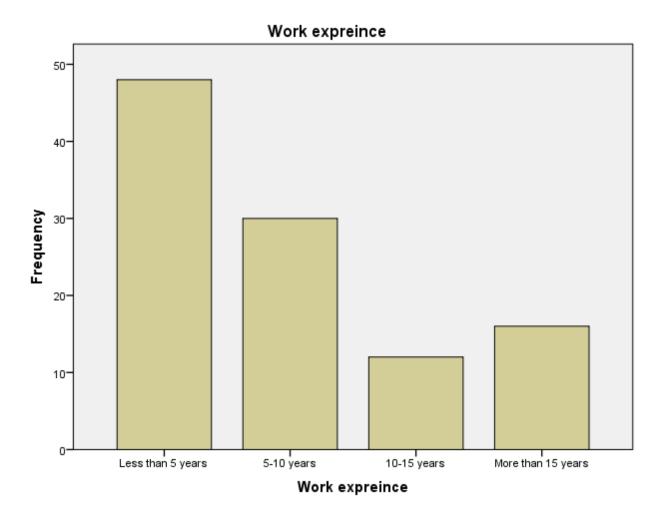
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Less than 5 years	48	45.3	45.3	45.3
	5-10 years	30	28.3	28.3	73.6
	10-15 years	12	11.3	11.3	84.9
	More than 15 years	16	15.1	15.1	100.0
	Total	106	100.0	100.0	

# **Bar Chart**









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#### **Statistics**

			Q1partA	Q2partA	Q3partA	Q4partA
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# **Frequency Table**

# Q1partA

				Cumulative
	Frequency	Percent	Valid Percent	Percent
Valid Yes	106	100.0	100.0	100.0

# Q2partA

-					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Yes	103	97.2	97.2	97.2
	No	3	2.8	2.8	100.0
	Total	106	100.0	100.0	

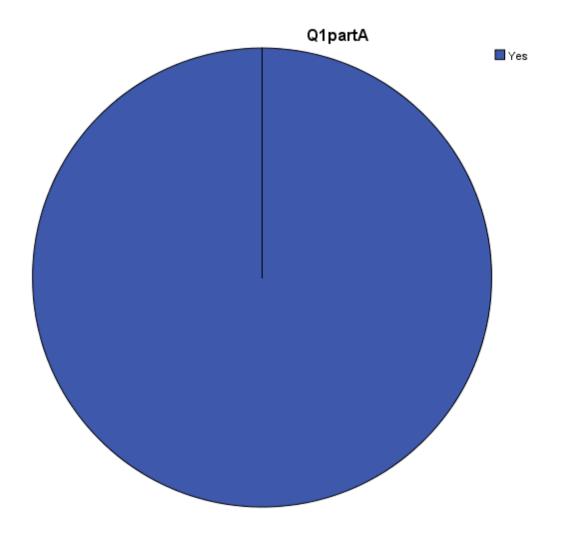
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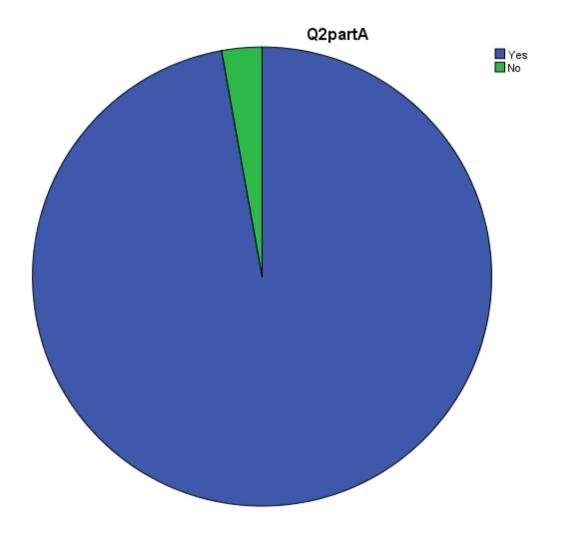
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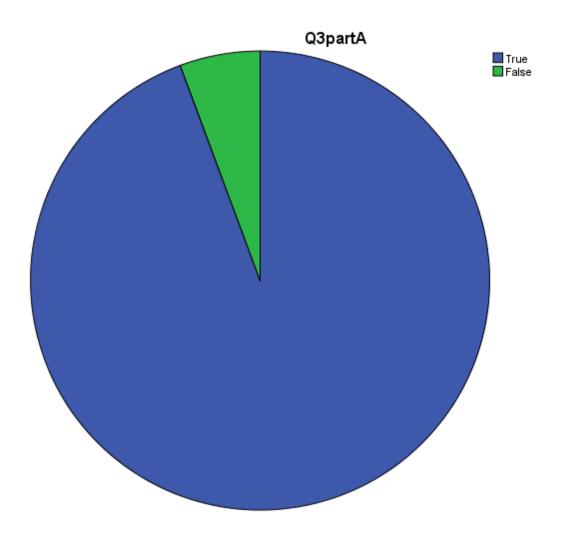
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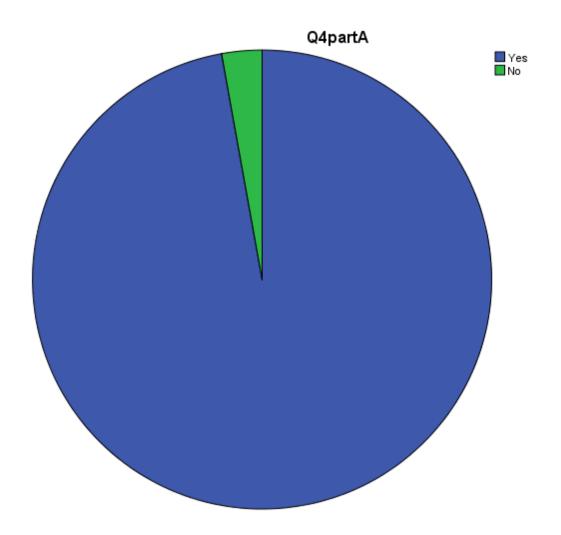
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Yes	103	97.2	97.2	97.2
	No	3	2.8	2.8	100.0
	Total	106	100.0	100.0	

## Pie Chart









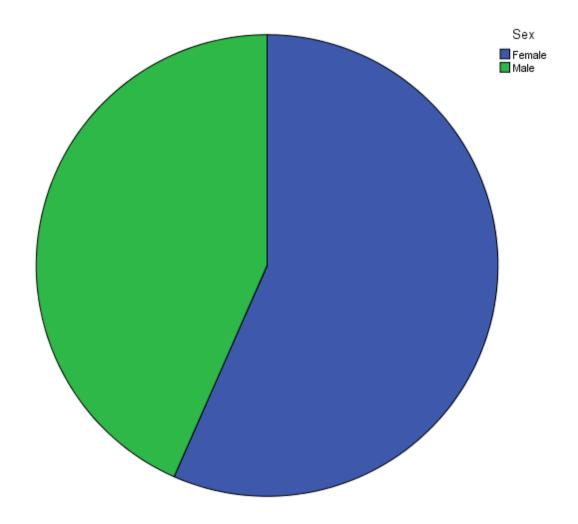
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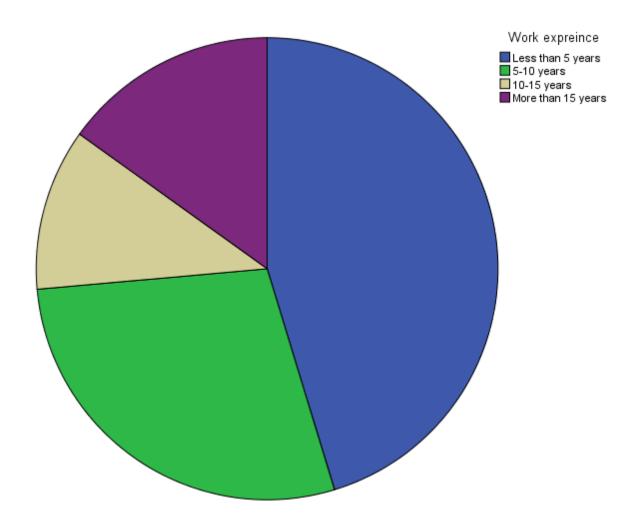
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# Frequencies

### Notes

Output Created		12-NOV-2018 15:37:55
Comments		
Input	Data	C:\Users\use\Downloads\Environm
		ent dataset.sav
	Active Dataset	DataSet2
	Filter	<none></none>
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	Data File	100
Missing Value Handling	Definition of Missing	User-defined missing values are
		treated as missing.
	Cases Used	Statistics are based on all cases with
		valid data.
Syntax		FREQUENCIES
		VARIABLES=Q1partB Q2partB
		Q3partB Q4partB Q5partB Q6partB
		/HISTOGRAM
		/ORDER=ANALYSIS.
Resources	Processor Time	00:00:02.23
	Elapsed Time	00:00:01.92

### **Statistics**

I			Q1partB	Q2partB	Q3partB	Q4partB	Q5partB	Q6partB
	N	Valid	106	106	106	106	106	106
		Missing	0	0	0	0	0	0

# **Frequency Table**

### Q1partB

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True	91	85.8	85.8	85.8
	False	15	14.2	14.2	100.0

	1	1	1	1
Total	106	100.0	100.0	
2 0 000	100	100.0	100.0	

# Q2partB

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Yes	100	94.3	94.3	94.3
	No	6	5.7	5.7	100.0
	Total	106	100.0	100.0	

# Q3partB

				Cumulative
	Frequency	Percent	Valid Percent	Percent
Valid Strongly agree	106	100.0	100.0	100.0

# Q4partB

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Strongly agree	103	97.2	97.2	97.2
	Agree	3	2.8	2.8	100.0
	Total	106	100.0	100.0	

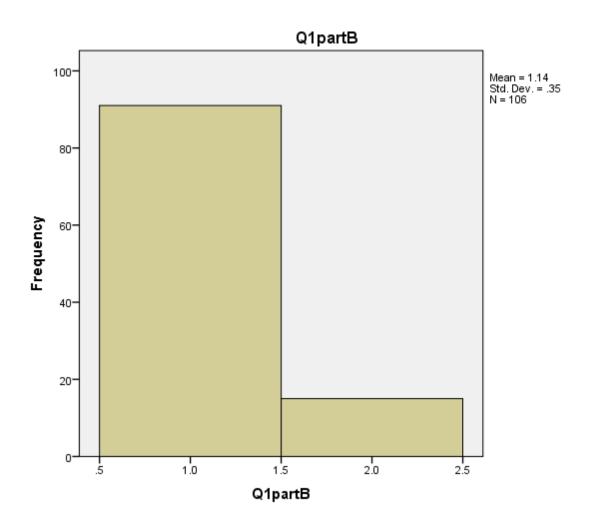
# Q5partB

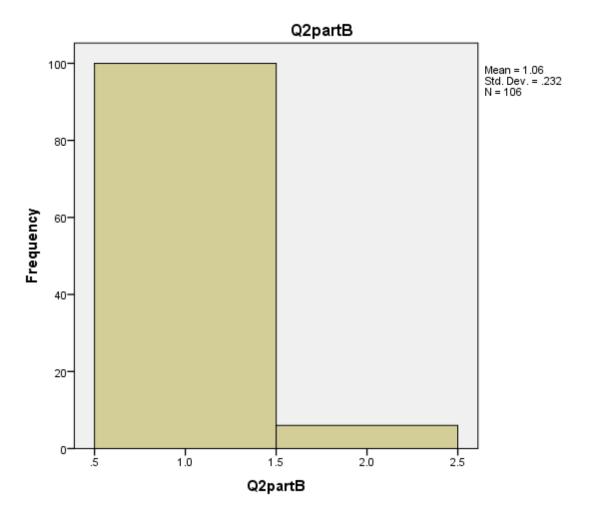
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Strongly agree	99	93.4	93.4	93.4
	Agree	7	6.6	6.6	100.0
	Total	106	100.0	100.0	

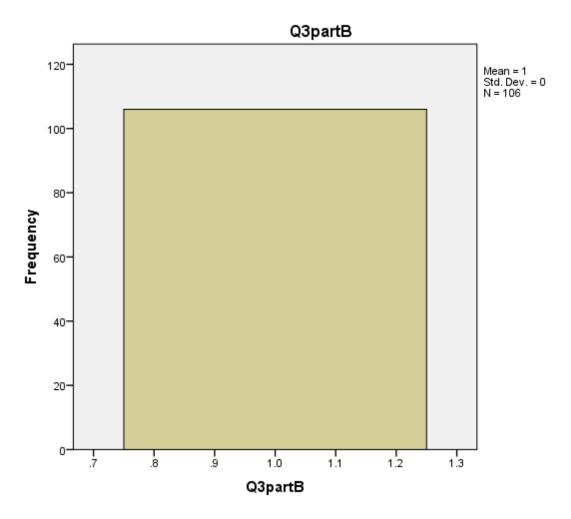
# Q6partB

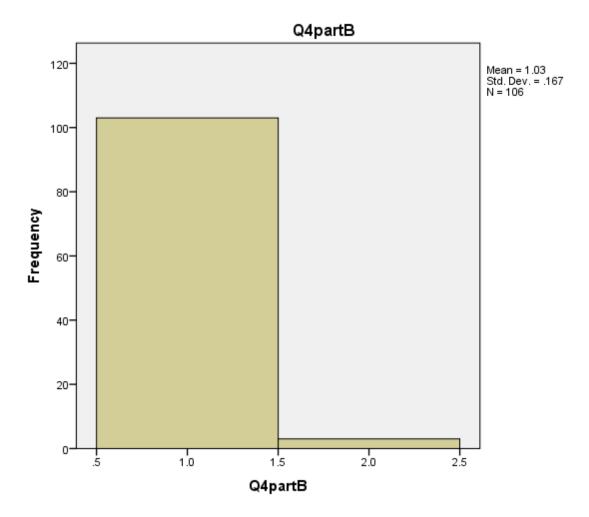
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Strongly agree	106	100.0	100.0	100.0

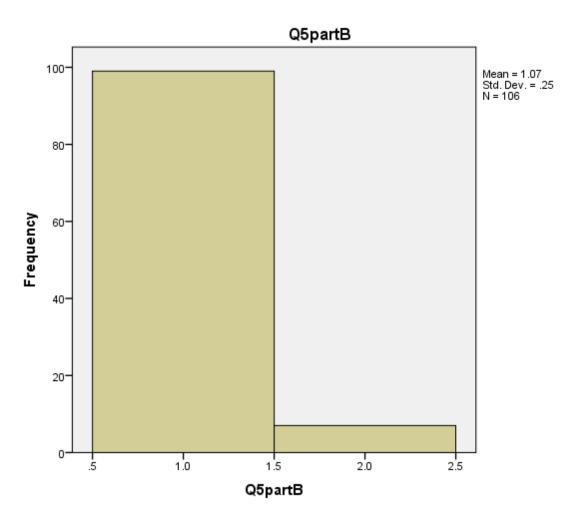
# Histogram

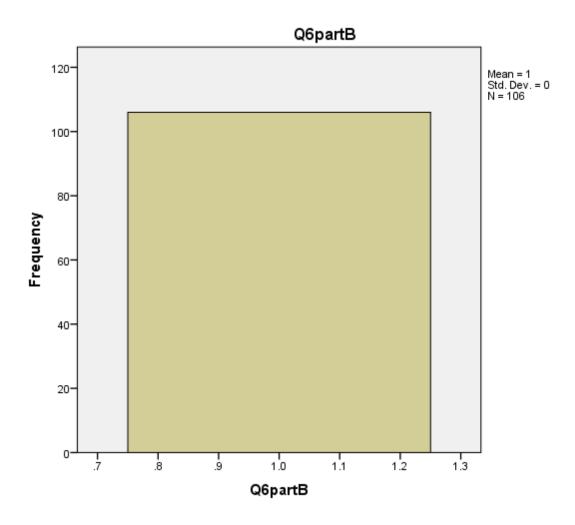












FREQUENCIES VARIABLES=Q1PartC Q2aPartC Q2bPartC Q2cPartC Q2dPartC Q2ePartC Q2fPartC Q2fPartC /BARCHART FREQ /ORDER=ANALYSIS.

## Frequencies

#### Notes

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Comments		
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	Weight	<none></none>
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	N of Rows in Working	106
	Data File	100
Missing Value Handling	Definition of Missing	User-defined missing values are
		treated as missing.
	Cases Used	Statistics are based on all cases with
		valid data.
Syntax		FREQUENCIES
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		Q2bPartC Q2cPartC Q2dPartC
		Q2ePartC Q2fPartC
		/BARCHART FREQ
		/ORDER=ANALYSIS.
Resources	Processor Time	00:00:02.45
	Elapsed Time	00:00:02.08

### **Statistics**

L			Q1PartC	Q2aPartC	Q2bPartC	Q2cPartC	Q2dPartC	Q2ePartC	Q2fPartC
	N	Valid	106	106	106	106	106	106	106
		Missing	0	0	0	0	0	0	0

# Frequency Table Q1PartC

				Cumulative
	Frequency	Percent	Valid Percent	Percent
Valid Yes	106	100.0	100.0	100.0

## Q2aPartC

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Strongly agree	73	68.9	68.9	68.9
	Agree	21	19.8	19.8	88.7
	Neutral	6	5.7	5.7	94.3
	Disagree	3	2.8	2.8	97.2
	Strongly Diagree	3	2.8	2.8	100.0
	Total	106	100.0	100.0	

## Q2bPartC

-					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Strongly agree	70	66.0	66.0	66.0
	Neutral	9	8.5	8.5	74.5
	9	27	25.5	25.5	100.0
	Total	106	100.0	100.0	

## Q2cPartC

-					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Strongly agree	88	83.0	83.0	83.0
	Agree	15	14.2	14.2	97.2
	Disagree	3	2.8	2.8	100.0
	Total	106	100.0	100.0	

## Q2dPartC

			Cumulative
Frequency	Percent	Valid Percent	Percent

Valid	Strongly agree	79	74.5	74.5	74.5
	Agree	3	2.8	2.8	77.4
	Neutral	21	19.8	19.8	97.2
	Disagree	3	2.8	2.8	100.0
	Total	106	100.0	100.0	

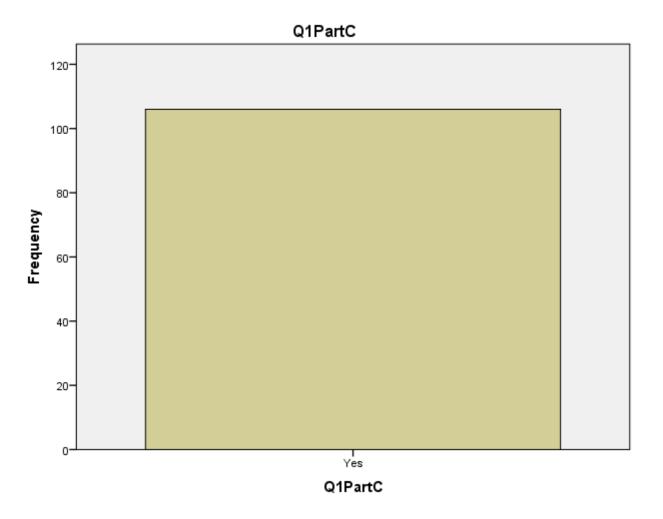
## Q2ePartC

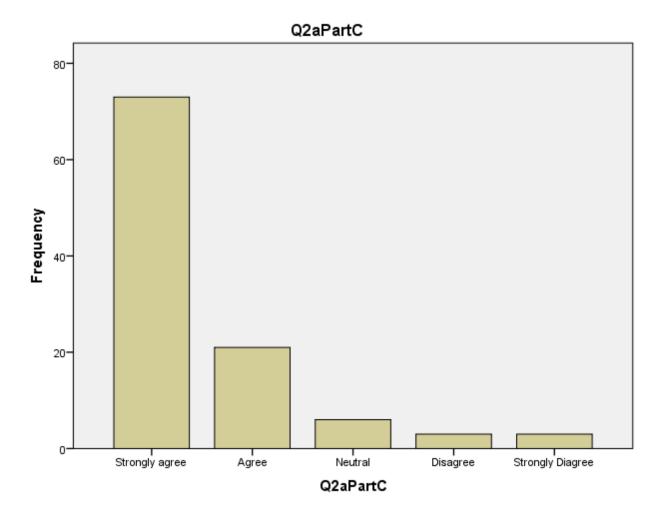
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Strongly agree	79	74.5	74.5	74.5
	Agree	18	17.0	17.0	91.5
	Neutral	6	5.7	5.7	97.2
	Strongly Diagree	3	2.8	2.8	100.0
	Total	106	100.0	100.0	

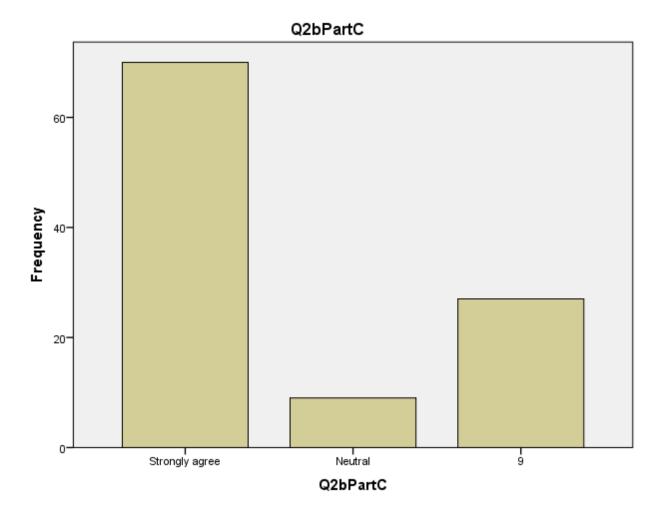
## Q2fPartC

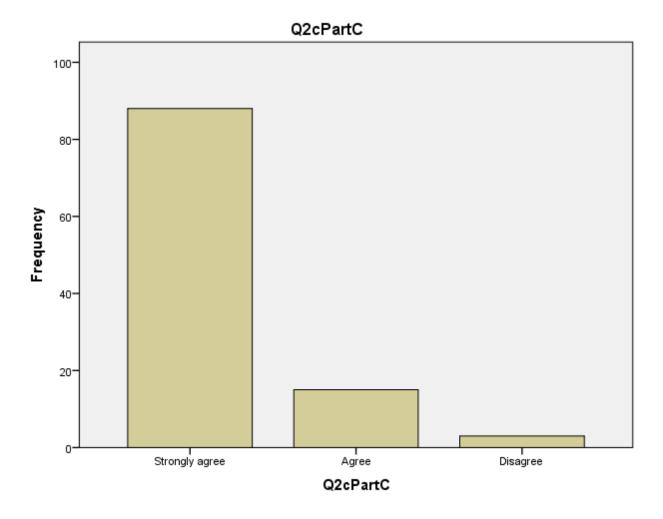
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Strongly agree	75	70.8	70.8	70.8
	Agree	18	17.0	17.0	87.7
	Strongly Diagree	13	12.3	12.3	100.0
	Total	106	100.0	100.0	

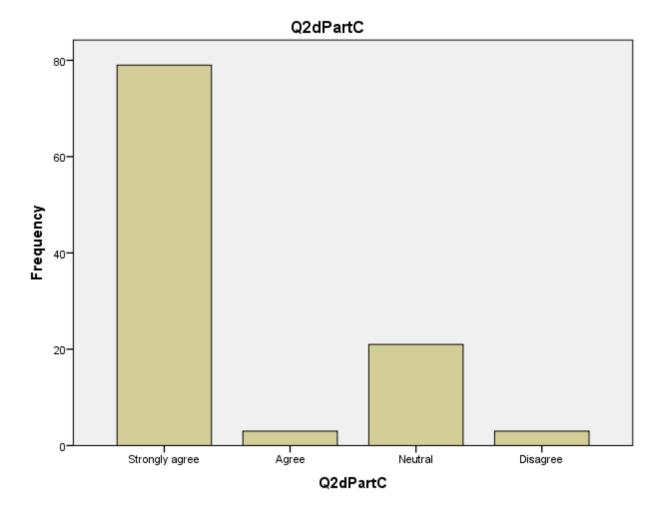
#### **Bar Chart**

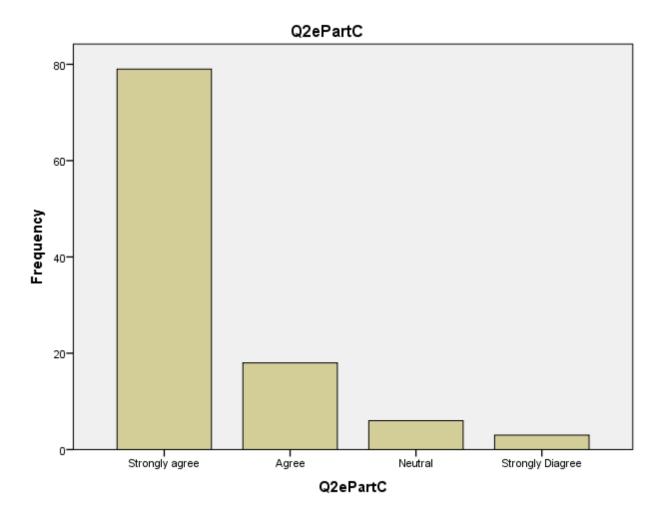


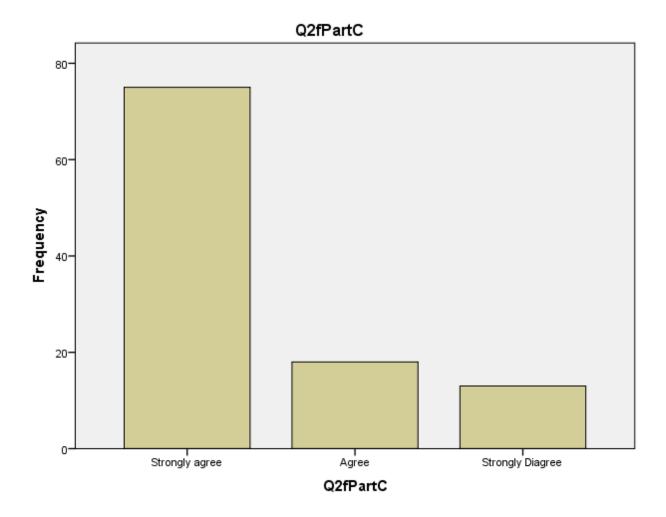












FREQUENCIES VARIABLES=Q1aPartD Q1bPartD Q1cPartD Q1dPartD Q1ePartD /BARCHART FREQ /ORDER=ANALYSIS.

#### **Frequencies**

#### Notes

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Comments		
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		ent dataset.sav
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	Weight	<none></none>
	Split File	<none></none>

	N of Rows in Working Data File	106
Missing Value Handling	Definition of Missing	User-defined missing values are
		treated as missing.
	Cases Used	Statistics are based on all cases with
		valid data.
Syntax		FREQUENCIES
		VARIABLES=Q1aPartD Q1bPartD
		Q1cPartD Q1dPartD Q1ePartD
		/BARCHART FREQ
		/ORDER=ANALYSIS.
Resources	Processor Time	00:00:01.51
	Elapsed Time	00:00:01.83

#### **Statistics**

		Q1aPartD	Q1bPartD	Q1cPartD	Q1dPartD	Q1ePartD
N	Valid	106	106	106	106	106
	Missing	0	0	0	0	0

# Frequency Table Q1aPartD

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Strongly agree	45	42.5	42.5	42.5
	Agree	42	39.6	39.6	82.1
	Neutral	11	10.4	10.4	92.5
	Disagree	8	7.5	7.5	100.0
	Total	106	100.0	100.0	

## Q1bPartD

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	72	67.9	67.9	67.9
	Agree	18	17.0	17.0	84.9

Neutral	12	11.3	11.3	96.2
Disagree	2	1.9	1.9	98.1
Strongly Diagree	2	1.9	1.9	100.0
Total	106	100.0	100.0	

## Q1cPartD

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Strongly agree	86	81.1	81.1	81.1
	Agree	9	8.5	8.5	89.6
	Strongly Diagree	11	10.4	10.4	100.0
	Total	106	100.0	100.0	

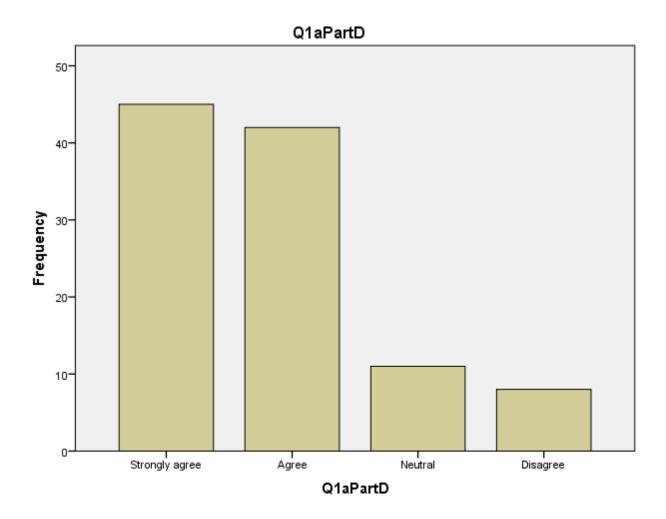
## Q1dPartD

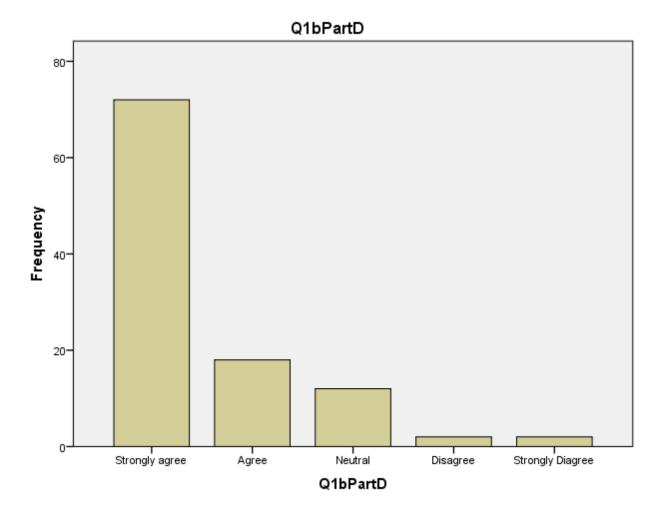
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Strongly agree	83	78.3	78.3	78.3
	Agree	19	17.9	17.9	96.2
	Neutral	4	3.8	3.8	100.0
	Total	106	100.0	100.0	

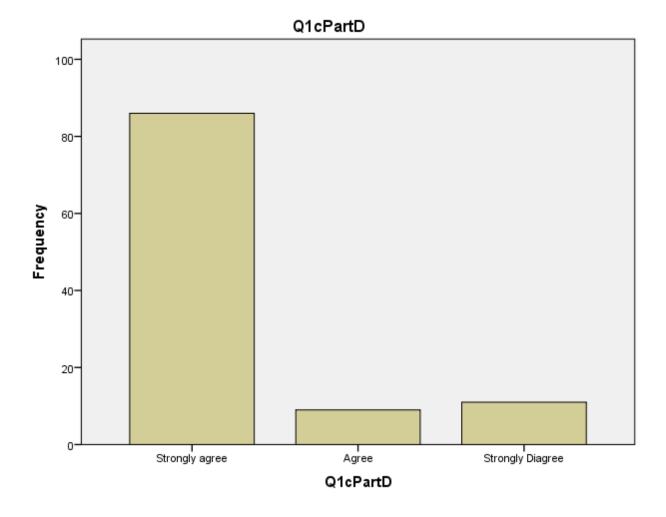
## Q1ePartD

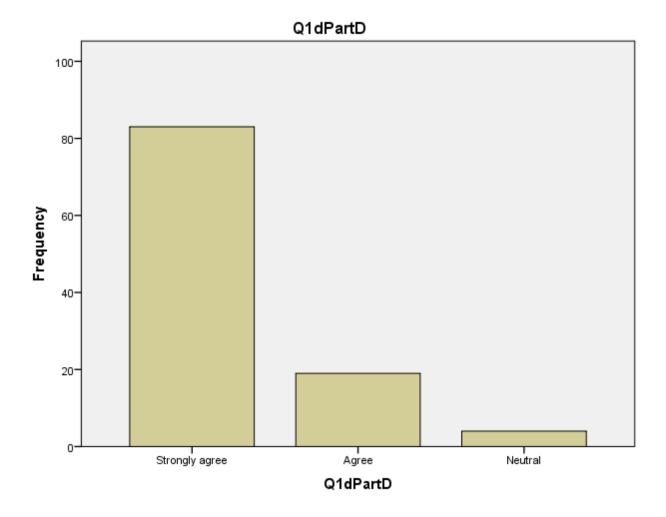
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Strongly agree	80	75.5	75.5	75.5
	Agree	18	17.0	17.0	92.5
	Neutral	6	5.7	5.7	98.1
	Disagree	2	1.9	1.9	100.0
	Total	106	100.0	100.0	

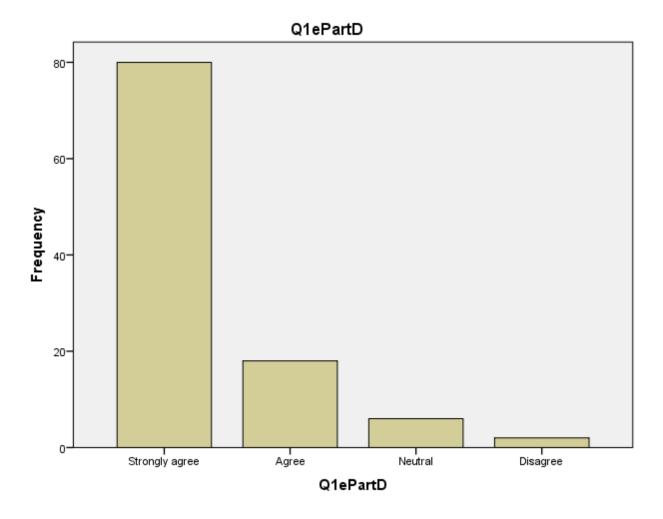
### **Bar Chart**











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