DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.

Signature: [Signature]  Date: 9th November 2015

Geoffrey Kiptoo Bett (C50/CE/14271/2009)
Department of Philosophy and Religious Studies

SUPERVISORS

We confirm that the work reported in this thesis was carried out by the candidate and has been submitted with our approval as University Supervisors.

Signature: [Signature]  Date: 9th November 2015

Dr. Margaret Gecaga
Department of Philosophy and Religious Studies

Signature: [Signature]  Date: 9th November 2015

Dr. Humphrey Mwangi Waweru
Department of Philosophy and Religious Studies
THE ROLE OF THE CATHOLIC CHURCH IN ENVIRONMENTAL
CONSERVATION IN KERICHO COUNTY, KENYA

BETT GEOFFREY KIPTOO
C50/CE/14271/2009

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS OF THE DEGREE OF MASTER OF ARTS IN RELIGIOUS
STUDIES IN THE SCHOOL OF HUMANITIES AND SOCIAL SCIENCES OF
KENYATTA UNIVERSITY

NOVEMBER 2015
DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.

Signature ………………………………………. Date: ………………………

Geoffrey Kiptoo Bett (C50/CE/14271/2009)
Department of Philosophy and Religious Studies

SUPERVISORS

We confirm that the work reported in this thesis was carried out by the candidate and has been submitted with our approval as University Supervisors.

Signature ………………………………………. Date: ………………………

Dr. Margaret Gecaga
Department of Philosophy and Religious Studies

Signature: ………………………………………. Date: ………………………

Dr. Humphrey Mwangi Waweru
Department of Philosophy and Religious Studies
DEDICATION

This thesis is dedicated to my parents William Bii and Esther Bii, my wife Naomi Bett and daughters Reona Chepkirui, Rhema Cherotich and to my brothers Willy Bett and Ishmael Bett for their support throughout my education.
ACKNOWLEDGEMENT

I wish to thank my supervisors Dr. Humphrey Waweru and Dr. Margaret Gecaga for their sage advice, insightful criticism, countless hours of reading and patient encouragement that aided the writing of my thesis in innumerable ways.

I acknowledge and thank the clergy and parishioners at the Catholic Diocese of Kericho for allowing me to conduct my research and for their steadfast support during the research.

Finally I would like to thank my family for their financial and moral support throughout my study. Special thanks goes to my parents William and Esther, my wife Naomy and daughters Reona and Rhema, brothers Willy and Ishmael for their continued support.

Finally, I would like to thank the mentor-teachers Mrs. Mabwai Joyce, Dr. Rop Ronald and the administrators of St. Monica Chebangang Girls Secondary School who allowed me time out, inspired and assisted me with this thesis.
OPERATIONAL DEFINITION OF TERMS

**Catholic Church:** The Christian Congregation that forms the Catholic diocese of Kericho.

**Conservation:** Protection and restoration from loss, damage or neglect of natural environments and the ecological communities that inhabit them.

**Desertification:** Transformation of arable or habitable land into a barren or desolate area due to destructive land activities, for example, cutting trees, overgrazing, soil erosion and exploitation of forest.

**Degradation:** Degeneration of the environment due to exploitation, destruction and pollution.

**Environment:** Surroundings or conditions in which people, animals, or plant thrive or operate.

**Environmental resources:** Sum total of all surroundings of a living organism, including natural resources and other living things which provide conditions for development and growth. They are materials such as minerals, forests, water, mountains and fertile land among others.

**Environmental Degradation:** The depletion of resources, the destruction of forests, pollution of water, air, poor waste disposal and depletion of soil.

**Environmental Conservation:** Preserving and protecting of natural resources in order to prevent it from exploitation and destruction through planting of trees, controlling soil erosion and proper waste disposal.

**Environmental Management:** A careful planning, use and control of natural resources. It is a purposeful activity with the goal of maintaining and improving the state of natural resource affected by human activities.

**Stewardship:** Caring and nurturing the environment, and protecting it from destruction.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACLCA</td>
<td>American Center for Life Cycle Assessment.</td>
</tr>
<tr>
<td>AIC</td>
<td>African Inland Church.</td>
</tr>
<tr>
<td>AGC</td>
<td>African Gospel Church.</td>
</tr>
<tr>
<td>EMCA</td>
<td>Environmental and Coordination Act.</td>
</tr>
<tr>
<td>FGC</td>
<td>Full Gospel Church.</td>
</tr>
<tr>
<td>FGDs</td>
<td>Focused Group Discussions.</td>
</tr>
<tr>
<td>IUCN</td>
<td>International Union for Conservation of Nature.</td>
</tr>
<tr>
<td>IPCC</td>
<td>International Panel on Climate Change.</td>
</tr>
<tr>
<td>KEC</td>
<td>Kenya Episcopal Conference.</td>
</tr>
<tr>
<td>NEMA</td>
<td>National Environmental and Management Authority.</td>
</tr>
<tr>
<td>NES</td>
<td>National Environmental Secretariat.</td>
</tr>
<tr>
<td>NGOs</td>
<td>Non-Governmental Organizations.</td>
</tr>
<tr>
<td>PHAST</td>
<td>Participatory Hygiene and Sanitation Training.</td>
</tr>
<tr>
<td>SDA</td>
<td>Seventh Day Adventist.</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations.</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environmental Programme.</td>
</tr>
<tr>
<td>UNRISD</td>
<td>United Nations Research Institute for Social Development.</td>
</tr>
<tr>
<td>WCM</td>
<td>World Commission on Environment.</td>
</tr>
<tr>
<td>WMO</td>
<td>World Meteorological Development.</td>
</tr>
<tr>
<td>USSC</td>
<td>United States Catholic Conference</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

Declaration .................................................................................................................................................. ii

Dedication.................................................................................................................................................. iii

Acknowledgements .................................................................................................................................. iv

Operational Definition of Terms ............................................................................................................... v

Abbreviations and Acronymns .................................................................................................................. vi

Abstract ................................................................................................................................................... x

## CHAPTER ONE: INTRODUCTION

1.1 Background to the Study ......................................................................................................................... 1

1.2 Statement of the Problem ......................................................................................................................... 7

1.3 Objectives of the Study ........................................................................................................................... 8

1.4 Research Questions .................................................................................................................................. 8

1.5 Research Premises ................................................................................................................................... 8

1.6 Justification of the Study .......................................................................................................................... 9

1.7 Scope and Limitations of the Study ......................................................................................................... 11

1.8.0 Literature Review ............................................................................................................................... 12

1.8.1 Causes Of Environmental Degradation .......................................................................................... 12

1.8.2 The Social Teachings of the Catholic Church on Environmental Conservation ..... 16

1.8.3 The Role of the Church in Environmental Conservation ................................................................. 20

1.8.4 Conceptual Framework ....................................................................................................................... 24

1.9.0 Research Methodology ....................................................................................................................... 29

1.9.1 Research Design ................................................................................................................................. 29

1.9.2 Study Area ........................................................................................................................................ 30

1.9.3 Target Population ................................................................................................................................ 31

1.9.4 Sampling Procedures ......................................................................................................................... 31

1.9.5 Research Instruments ......................................................................................................................... 34

1.9.6 Data Analysis .................................................................................................................................... 34
1.9.7 Data Management And Ethical Considerations .................................................. 35

CHAPTER TWO: ENVIRONMENTAL DEGRADATION IN KERICHO COUNTY

2.1 Causes of Soil Degradation ................................................................................. 37
2.2 Causes of Degradation of Forests Reserves and Vegetative Cover .................. 39
2.3 Pollution of Fresh Water ....................................................................................... 44
2.4 Overstocking ........................................................................................................ 49
2.5 Air Pollution .......................................................................................................... 50
2.6 Poor Waste Disposal ............................................................................................ 51
2.7 Poverty and Environmental Degradation ............................................................. 54
2.8 Mining .................................................................................................................. 55

CHAPTER THREE: SOCIAL TEACHINGS OF THE CATHOLIC CHURCH ON ENVIRONMENTAL CONSERVATION

3.1 A Sacramental Universe ....................................................................................... 59
3.2 Respect for Life .................................................................................................. 62
3.3 The Planetary Common Good .......................................................................... 65
3.4 A New Ecological Solidarity ............................................................................ 67
3.5 Universal Purpose of Created Things ................................................................. 69
3.6 Option for the Poor ............................................................................................. 71
3.7 Authentic Development ...................................................................................... 74

CHAPTER FOUR: THE ROLE OF THE CATHOLIC CHURCH IN ENVIRONMENTAL CONSERVATION IN KERICHO COUNT

4.1 The Catholic Church and Environmental Awareness ....................................... 78
4.2 The Catholic Church and Environmental Conservation ..................................... 89

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of the Findings .................................................................................. 104
5.2 Conclusion .......................................................................................................... 112
5.3 Recommendations ........................................................................................................112
5.4 Suggestions for Further Study ......................................................................................116
REFERENCES ..................................................................................................................117
APPENDICES ..................................................................................................................127
APPENDIX 1: RESEARCH INSTRUMENTS ....................................................................127
APPENDIX 2: CATHOLIC ENVIRONMENTAL PROGRAMMES ....................................136
APPENDIX 3. LIST OF INFORMANTS ...........................................................................149
APPENDIX 4: MAP OF KERICHO COUNTY ...................................................................152
The church as a social institution and its adherents in their individual capacity as members of the society, have a social and moral responsibility to be involved in environmental conservation. Nature is a precious resource which the present generation has inherited and must therefore be preserved for future generations. The way the church cares for these natural resources is a measure of its stewardship and respect to the Creator. The study focused on the role of the Catholic Church in environmental conservation in Kericho County. The study sought to identify the causes of environmental degradation in Kericho County. The research assessed the fundamental social teachings of the Catholic Church on environmental conservation. It also evaluated the contribution of the Catholic Church in environmental conservation in Kericho County. Inspite of the Christian teachings provided by the Catholic Church in Kericho on environmental conservation, the residents of Kericho County have continued to experience environmental problems. This leads one to question the role of the church in propagating environmental issues and awareness in this County. The study was guided by liberative solidarity model. According to this model, the church must be in solidarity with the weakest part of the whole creation. The study was conducted in Kericho County by use of questionnaires and interviews. The study employed random and purposive sampling to select respondents. The study targeted a sample size of 159 respondents. Qualitative methods of data analysis were employed in the study. This involved description, classification, interpretation and synthesis of data. The primary data was then integrated with secondary data. Guided by the objectives and the premises of the study, the raw data was collated and arranged thematically. The respondents reported that the following were the main causes of environmental degradation in Kericho County: deforestation 89%, poor farming 74%, infrastructure development 33%, industrial Waste 64%, industrial smoke 64% and overgrazing at 52%. The research findings established that deforestation and poor farming methods were the major causes of environmental degradation in Kericho County. The study confirmed that an overwhelming majority of the respondents put more emphasis on seminars and workshops as an effective way of conserving the environment. Over 67% of the respondents felt that seminars and workshops can assist in providing direction; in forming new values that stress individual and joint responsibility towards the environment. Moreover, 62% responded that they were able to acquire knowledge on how to effectively conserve the environment through regular sermons from the catholic clergy. It is evident from the results that other programmes employed by the Catholic Church towards environmental conservation include publishing of literature 37%, education on environmental and government policies 60% and championing of waste collection during environmental days 48%. Environmental projects and programmes are effective when implemented at the grassroots within the Church structure right from the family, the Christian Community to National level. The Church should champion for policies to be put in place to prevail upon people to carefully use their environment. The Catholic Church has notable potential, especially viable systems for environmental conservation.
CHAPTER ONE: INTRODUCTION

1.1 BACKGROUND TO THE STUDY

Human beings depend on the environment for their physical needs such as food, water, air, shelter and clothing, which are necessary for their survival. This calls upon people to carefully use the resources in the environment, to guarantee human survival. Natural environments that store water, protect the soil, or are habitats to distinctive plants and animals, have been degraded or converted to other uses. The church has a duty to manage and protect the environment on which human beings and other creatures thrive. God has entrusted these natural resources to human beings.

The landmark report of the World Commission on Environment (WCM) has warned that unless we change many of our life style patterns, the world will face unacceptable levels of environmental damage (Nisbet 1991:137). The Commission echoing the urgent need for tailoring the pace and the pattern of global economic growth to the planet's population argued that humanity has the ability to make development sustainable. This will ensure that it meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

Gottlieb (1996:636) points out that global warming which has led to tremendous effects on the environment is responsible for the changing climate patterns, increasing drought in many areas and thus threatening agriculture and wildlife. Most countries face complex environmental challenges. He further notes that the natural resource base that is essential for development is continually being weakened and undermined by unsustainable land use practices such as overgrazing, deforestation, and mechanized
agriculture. Boff (1995:16) echoing Gotlieb’s views points out that the main global problems associated with environmental degradation are acid rain, atmosphere pollution, the destruction of the ozone layer, deforestation and desertification.

Pope John Paul II, in his New Year’s message of 1990, stressed the need for recognizing nature as God’s creation, thereby, giving it proper respect. He pointed out that the environmental devastation is the result of peoples’ behavior that disregards the God-given order and harmony of nature. He made references to the indiscriminate application of advances in science and technology which resulted in pollution of the common resources, which if left unchecked, lead to disrespect for life and integrity of creation. He identified greed and selfishness as the major causes of environmental crisis, both at an individual and corporate level and called for an internationally coordinated approach and management of the earth’s environmental resources (Clifford 1996:20).

Gecaga (1999:37) highlights that there is a special law and responsibility for humans towards the rest of creation as God’s stewards. Furthermore, stewardship puts human beings in harmony with nature, standing before God in the management of human affairs and creation. The notion of stewardship respects God’s sovereignty over all the earth. Thus human beings have a responsibility of sustaining the creation and preserving it for future generations.

Christiansen and Grazer (1996:5) argue that the new Catechisms of the Catholic Church calls attention to the fact that ‘our creed begins with the creation of heaven and earth, for creation is the beginning and the foundation of God’s work’. It further affirms
that all creatures bear certain resemblance to God. The manifold perfections of creatures—their truth, their goodness, and their beauty, all reflect the infinite perfection of God.

At Vatican II, the Council in its document, *The Pastoral Constitution on the Church in the Modern World*, stated that at all times; the church carries the responsibility of reading the signs of the times and interpreting them in the light of the Gospel. Given the accumulating scientific evidence and increasing public and political concern over the environmental and ecological issues, these matters are a sign of the times (Christiansen and Grazer 1999). While science plays the role of helping to determine the full extent of these problems, the role of religion is to help believers and others of good will address these concerns in the context of faith and with moral urgency.

According to Blake (1996:1999), environmental justice is the logical complement to the Catholic Church’s social teaching on justice and peace. The Church takes human-centered view, that the earth is important because it sustains human life. Human practices are to support the availability of resources in this generation and in generations to come. Issues of peace, justice, and the environment point to a holistic perspective; all human activities and creation are interconnected.

In Africa, environmental conservation and promotion of awareness have become matters of great concern because of its complex, widespread and long-term contribution to survival of life. Africa’s under-development has had a negative bearing on the environment (Gitau 2000:1). This is well exemplified by the magnitude of soil erosion, overgrazing and deforestation in certain parts of the continent, for example in Kenya.
Management and conservation of protected areas in African countries has been severely curtailed by many threats and challenges including: overexploitation of resources; encroachment of natural habitat by increased human populations; closure of wildlife migrating corridors and dispersal areas, recurring droughts, desertification, land degradation and inequitable sharing of benefits occurring from natural resources (Stiles 1993:168). The impact of this constraints and limitations are manifested in the poor state of the environment in African countries, Kenya included.

Karanja (2001:1) argues that while Kenya’s economy is undoubtedly growing, at the same time there are signs of environmental degradation and pollution. Forests have declined, wetlands have decreased and wildlife numbers have fallen. Water and land shortage are widespread, other renewable and nonrenewable natural resources are being rapidly depleted. There is also a growing use of toxic chemicals, and discharge of waste effluent into the soil, water and air. These changes all send signals that Kenya’s environmental resource base is slowly being depleted and degraded.

Emerton (1997:1) points out that the rapid growth of human population in Kenya and the consequent demand for basic needs has exerted tremendous pressure on natural resources and the environment. The present exploitation rate of many of the natural resources on which Kenya’s development largely depends is unsustainable. Natural ecosystems that store water, protect the soil, or are habitats to unique plants and animals, have been degraded or converted to other uses.

The Kenyan economy is primarily dependent on agriculture and natural resources. Agricultural production is an integral component of rural development which
contributes to improved rural livelihoods. However, initiatives for sustainable management and conservation of environmental and natural resources do not receive high priority in budgetary allocation (Copper and Palmer 1992:87). Sometimes the government is too eager to get investments and infrastructure development even if it is at the expense of the environment. Though there have been considerable efforts, there are still some challenges in mainstreaming environment in development. Unsustainable loggings of trees, pollution, deforestation, poor land use and poor waste management have been a major environmental challenge in the country. Consequently, incidents of land degradation in Kericho County have impacted negatively on both the environmental and socio-economic development. Human-induced activities such as agriculture, logging for timber and industry, cattle ranching and encroachment to forest reserves for settlement have been blamed for environmental degradation in Kericho County.

In Kenya, Christianity claims the largest percentage of following in terms of religious faith. The implications of this percentage for environmental issues are quite critical. This leads one to question the role of the church in propagating environmental issues and awareness in Kenya (Gitau 200:3). Christian teachings enjoin them to take care and protect the environment (Genesis 1:28). Nevertheless, it is the duty of Christians and of all who look to God as the creator to protect the environment by restoring a sense of reverence for the whole of God’s creation in reference to Kenya’s vision 2030 on environment.
The clergy and laity, according to Otim (1992:64), can draw comprehensive specialized knowledge and personal initiative because of their vast knowledge on biblical teachings on the environment. This makes them best placed to spearhead grass root environmental conservation and establishment of sustainable development. The Kenya Episcopal Conference (KEC) has initiated awareness and education on environmental stewardship based on Catholic social teaching. This has targeted the clergy, seminarians, catechists, Catholic women, men and youth associations. They are able to integrate environmental issues in their mission of spreading the good news in their churches.

Gitau (2000:105) rightly observes that Christians as responsible stewards need to embrace environmental ethics which stipulate what they should do regarding nature or the material universe. However, if the church is to fulfill its environmental mission, it will have to deal with the challenge of stewardship. The church is meant to be a sign of the redemptive obedience of Christ to the Father; which has its aim in the salvation of all human and non-human beings of the whole universe.

The Catholic Church in Kericho County has been in existence in this region before Kenya’s independence. However the Catholic Diocese of Kericho was established officially in 1995. The Catholic Diocese of Kericho currently has four deaneries: Kipkelion, Kericho, Bureti and Bomet. The Church has 23 Parishes which are evenly spread in Kericho County. The Catholic Church being a well-established religious institution in Kericho County has a great responsibility to care and conserve the environment.
The Pastoral letter, *African Faith Commitments for a Living Planet*, published by the Kenya Episcopal Conference in June 2012, invites all Catholics to prioritize their engagement with environmental care as a way of appreciating and advancing the creative mission of God whose image human beings bear. Further it emphasized the need to integrate Christian songs, poems, drama and homilies to promote care of the environment as a Christian obligation and priority (http://www.arcworld.org/downloads/African). Thus, the Catholic Church in Kericho County has a duty to educate people in environmental responsibility, training them in the stewardship over creation which God has entrusted to humanity. All have a moral duty to care for the environment, not only for their own good but also for the future generations. The study therefore attempted to find out the role of the Catholic Church in environmental conservation with particular reference to Kericho County.

### 1.2 STATEMENT OF THE PROBLEM

Inspite of the Christian teachings provided by the Catholic Church in Kericho on environmental conservation, the residents of Kericho County have continued to experience environmental degradation. This leads one to question whether these biblical imperatives and teachings have been understood by Christians, and if the Catholic Church has applied them in conserving and creating awareness on environmental protection in Kericho County. Since environmental degradation is a matter affecting the lives of human beings and the entire universe, there is concern on the role the church can play in environmental conservation and management.
If the issue of environmental conservation and management in Kericho County is not treated with the seriousness it deserves, then it will be difficult to obtain sustainable economic development. This in the long run will make it difficult for Kenya to achieve equity in national development as well as achieve vision 2030.

1.3 OBJECTIVES OF THE STUDY

a) To investigate the causes of environmental degradation in Kericho County.

b) To assess the social teachings of the Catholic Church on environmental conservation.

c) To evaluate the role of the Catholic Church in environmental conservation in Kericho County.

1.4 RESEARCH QUESTIONS

a) What causes water and soil degradation in Kericho County?

b) How do the social teachings of the Catholic Church contribute to environmental conservation in Kericho County?

c) How do the Catholic Church’s clergy and parishioners enhance environmental conservation in Kericho County?

1.5 RESEARCH PREMISES

a) Environmental degradation in Kericho County is caused by human activities including agriculture, ranching, infrastructural development and human settlements.
b) The social teachings of the Catholic Church have contributed in creating awareness on environmental conservation in Kericho County.

c) The Catholic Church has played a significant role in enhancing environmental conservation in Kericho County by empowering people on proper waste disposal, distributing tree seedlings, and protecting water catchment areas.

1.6 JUSTIFICATION OF THE STUDY

There are three main reasons for this study. Firstly, the condition of the environment in Kericho County is deteriorating. This is frightening because the environment is the matrix of human, animal and plant lives. Destruction of the environment soon leads to the destruction of the social environment. Although modern technological agriculture increases productivity and reduces the cost of production, it destroys the soil and also pollutes the air. The continued degradation of the critical natural resources in Kericho County poses a threat to social and economic life. There can be little doubt that the threat posed by human exploitation of the environment is one of the most serious problems facing Kericho County. Environmental degradation is bound to affect all humanity in one way or the other. The church being a social institution is concerned with the welfare of its members, who are affected by environmental degradation. Therefore there was a need for a study to be carried out on the contribution of the Church in environmental conservation and management in Kericho County.

Secondly, the theme of stewardship in relation to God’s creation is underscored in the Holy Scriptures. Christianity, as a religion based on the Holy Bible, can certainly
influence the thinking of many on human relationship with nature. Christians are called upon to take all possible action to ensure responsible stewardship over nature. They are to relate well with animals and prevent pollution of the air, soil and water. Christians are best placed to spearhead grassroots environmental conservation and establishment of suitable environmental guidelines, since they are in the society. Humankind has been given the responsibility of shepherding, nursing and protecting the natural environment. It is therefore important that such insights are highlighted in order to provide guidance on how human beings can best relate with nature. This study is significant in that it highlights the Church’s role in empowering Kericho County residents, particularly Christians on environmental conservation.

Finally, the study also provides up-to-date information on the contribution of the Catholic Church in environmental conservation in Kericho County. The Catholic Church plays an active role in offering charitable services to all God’s people without discrimination. Environmental care and sustainability is given prominence in pastoral projects that have been implemented by the Catholic Church in Kericho County. This is done in fulfillment of God’s command to humankind (Genesis 2:15). The study also brings out the current fundamental social teachings of the Catholic Church on the environment and nature. This study may result in the formulation of important principles of knowledge and solution to significant problems. The study contributes information to policy-makers on conservation and protection of the environment. In addition it contributes to scholarly knowledge on the role of the Catholic Church in Kericho County in protecting and nurturing the environment. The study also generates
information on the forms of environmental degradation, possible causes and appropriate ways of dealing with this challenge.

1.7 SCOPE AND LIMITATIONS OF THE STUDY

In the study, attention was paid on the activities which involve the use of land, forests, and water resources in Kericho County. Environmental degradation including pollution of land, water, and air, soil erosion and loss of fertility, depletion of water resources and deforestation were evaluated. The causes of degradation of these natural resources and the efforts made by the Catholic Church in environmental conservation and management were examined.

The study distinctly focused on the Catholic Diocese of Kericho. It focused on the economic activities of the parishioners and their response to environmental conservation. The efforts made by the Catholic Church in enhancing environmental care were also evaluated. The contributions of other religious faiths and Non-governmental Organizations in environmental conservation in Kericho County were left out because it would have been impossible to cover all the religious faiths in a single study. The churches as social institutions and its adherents in their individual capacity as members of the society have a social and moral responsibility to be involved in environmental conservation.
1.8.0 LITERATURE REVIEW

Literature on the environment is immense and diverse. It has been reviewed thematically guided by the objectives of the study under three general themes. The first is an analysis of the causes of environmental degradation. The second theme is a survey on the social teachings of the Catholic Church on environmental conservation. The final theme focuses on the Catholic Church’s role in environmental conservation.

1.8.1 CAUSES OF ENVIRONMENTAL DEGRADATION

The United Nations Research Institute for Social Development (UNRISD 1992:6) points out that the impact of environmental degradation takes many forms; most importantly people’s livelihoods and productive capacities suffer as a direct result of the depletion or misuse of the natural resources on which they depend. Simmons (1974) and Meyer (1996) point out that the increasing magnitude of industrial production processes is creating a set of environmental degradation. These in turn impairs not only the usefulness of the environment but also its life supporting capability. They further argue that the use of technologies affects the environment in three basic ways: in the harvesting of resources, in the emission of wastes during the production process, and in the emission of wastes in the consumption of the goods or services produced. Such industrial waste corrodes and degrades the land surface and makes it unproductive.

Most industries have inadequate and inefficient waste disposal facilities hence they discharge their effluents directly into streams, rivers and lakes. Waste management is a
great challenge due to the absence of modern facilities for proper disposal. Improper waste disposal has thus enhanced land degradation and reduced the quality of the environment. These studies were important to the study because they pointed out the contribution of technological development to environmental degradation.

According to Falcke (1988:3), the human quest for dominion over nature in the modern age has led to destruction and pollution of nature. Pollution of the environment especially related to land, water and air has led to adverse effects on animal and human health, as well as the quality of the environment.

Gottlieb (1996) and Msafiri (2007), argue that environmental degradation is not only a danger to health, an economic catastrophe, or an aesthetic blight but also sacrilegious, sinful and an offence against God. This is due to the destruction of the God-given environment of which humanity have been commanded to take care of. They further argue that human activity affects the future of the earth community. Some of the consequences of the ever-increasing human activities are overgrazing, over cultivation and unplanned development projects which result in severe environmental destruction.

Human beings have for long used air, land and water resources as ‘sinks’ into which they dispose of the wastes they generate. These disposal practices leave most wastes inadequately treated, thereby causing pollution. The environment is being threatened with disintegration because of human sin and injustice, which result in oppression of both the people and nature.

Abraham (1994) and Msafiri (2007) point out that there is a fundamental cause and effect relationship between poverty and environmental degradation. Poverty undermines
the capacity of human beings to manage natural resources wisely and sustainably. For instance, many of the charcoal sellers engage in their business to earn money in order to survive regardless of massive destruction of forests and trees. Unless the poor have alternative source of food and basic needs like fuel, they too will wantonly destroy whatever natural environment is around them for survival. These studies are relevant to the study because they recognize poverty as a major cause of environmental degradation and thus the need to liberate the poor from these environmental injustices.

According to Gichere (2001:1), human activities, including agriculture, tourism, ranching, infrastructure development and human settlements have often disregarded sustainable use of natural resources and thus destroy the environment. He further argues that, degradation of natural resources will adversely affect productivity of land and increase levels of poverty. The foregoing literature highlights human activities as the major causes of environmental degradation.

Gecaga (1999) and Gitau (2000) rightly observe that environmental degradation is as a result of chemicals in industry and agriculture which pollutes the air, water and soil. Furthermore they argue that, cutting down of forests destroys the natural habitat of thousands of living forms. Mining and other extractive industries are rapidly depleting sources of energy and mineral resources. The depletion of the ozone layer exposes the earth’s surface and atmosphere to harmful rays from the sun. They further point out that climate change that we observe as a result of the ‘greenhouse effect’ will increase famine and bring about social disruptions of an incredible magnitude.
The change in climate alters rainfall patterns and variability and thus increases frequency and intensity of floods, droughts and rise in sea levels. This in turn has affected crop yields, increased vector borne diseases, destroyed infrastructure, contaminated fresh waters and degraded agricultural lands. This has made the environment increasingly unsuitable and unhealthy for human habitation. Therefore all human activities are likely to adversely affect natural resources and ecosystems. The foregoing literature is important to the study since it gives a reality of the state of environmental degradation in Kenya and Kericho County in particular. The study utilized these insights in making an analysis of environmental situation in Kericho County.

Wangiri (1999:80) argues that the destruction of the ecological environment leads to the destruction of the social environment. She notes that modern technological agriculture destroys the soil and also pollutes the air. She points out that desertification is the soil’s arch-enemy. It results from the loss of top soil through falling of trees, overgrazing and poor farming methods. Owing to the growing demand on available land by industrial projects and urban settlements, and desertification, peasants have to eke out a living from poorer soils. These require heavier fertilizer inputs which further deplete the soil by polluting it.

Gecaga (1999) and Ongong’a (1999) observe that technological reasoning degrades nature to mere quantity of extension, at the mercy of scientists and technologists. Nature is then treated as a raw material for industrial production. They summarize the causes of environmental destruction as: population growth, resource depletion, runaway
technology and atmospheric damage. Humanity have exploited, modified, and destroyed the environment to an extent that it can hardly offer sustenance to the people. Thus, the need for the church to empower Christians on proper management and conservation of the environment through its teachings. These studies are relevant to the study because they highlight various causes of environmental degradation which the study focuses on in Kericho County.

1.8.2 THE SOCIAL TEACHINGS OF THE CATHOLIC CHURCH ON ENVIRONMENTAL CONSERVATION

In his 1990 World Day of Peace message, Pope John Paul II addressed the ecological question (McHugh 1996:323). He placed this discussion in the context of humanities quest for peace; peace among nations, peace among peoples, peace within nations and families. The Pope, in reference to the account of creation in the book of Genesis, notes that the creation events are always followed by the refrain ‘And God saw that it was good’. When human beings reject the creator’s plan, or recklessly ignore it, they provoke a disorder which has inevitable repercussions on the rest of the created order. Thus Christians must protect and show respect for all creation.

Christiansen and Grazer (1996:7) note that the U.S Catholic bishops echo and expand upon the concepts and concern of Pope John Paul for the environment. While the bishop’s statement deals extensively with the environment as a moral challenge, they root their commentary in scripture and in the sacramental tradition of the Church. The bishops emphasized that creation reveals the presence, wisdom, and goodness of God
and reflects God’s strength and steadiness. It reflects God’s presence and diversity. The beauty of creation, its order and harmony, speaks of a divine Creator. Creation is not therefore just a backdrop for human activity; it is a sacramental sign of the presence of God. It is this God centered approach to creation and environment that calls people to respect and reverence it as a pathway to union with God. Human beings are part of creation, as stewards within it, not separate from it. The foregoing literature is important to the study because it explores the concepts and concern of the Catholic Church in environmental conservation.

Gottlieb (1996), Hesell (1996) observe that the dominion granted to human beings in Genesis 1:28 is not absolute. They emphasize that human beings must share the earth’s bounty equitably and respect the created order of the cosmos. It is to the creator of the universe that we are accountable for in the preservation and caring of the environment. God is the creator and human beings are God’s creatures who have been called to care for, cultivate and preserve God’s work (Gen 2:15). They further note that the earth and its fullness; the world and those who dwell in it belong to the Lord, (Psalms 24:1). These studies are relevant to this work because Christians are part of creation, and thus stewards within it. It is therefore the Christian duty to preserve and conserve forests, water, soil and air.

United States Catholic Conference (November 14, 1991) stated that the tradition of the Catholic social teaching offers a developing and distinctive perspective on environmental issues as it serves as a basis for engagement and dialogue with science, the environmental movement and other communities of faith and good will
(Christiansen and Grazer 1996:230). The U.S bishops’ statement, ‘Renewing the Earth’ inaugurates official Catholic reflection on environmental issues in the light of basic themes of Catholic social teaching. In the document they identified eight themes of Catholic social teaching which express integral dimensions of ecological responsibility:

- a God-centered sacramental view of the universe, which underpins human accountability for the fate of the earth; a consistent respect for human life which extends to respect for all creation; a world view affirming the ethical significance of global interdependence and the common good.

The bishops affirmed solidarity promoting cooperation and a just structure of sharing in the world community. They also emphasized on the understanding of the universal purpose of created things which requires equitable use of earth’s resources. They further insisted on the option for the poor which gives passion to the quest for an equitable and sustainable world. Finally the bishops held on a conception for authentic development which offers a direction for progress that respects human dignity and limits to material growth.

Hinze (1996:167) argues that the Catholic teaching emphasizes the universal common good which is specified by the duty of solidarity. He notes that solidarity requires sacrifices of our own self-interest for the good of others and of the environment we share (Pope John Paul II EC, no. 10). He further observes that the Catholic social teachings focus on authentic development which supports moderation and austerity in the use of material resources. It also encourages a balanced view of human progress consistent with respect for nature. Furthermore, it invites the development of alternative
visions of the good society and the use of economic models with richer standards of well-being than material productivity alone. Authentic development also requires affluent nations to seek ways to reduce and restructure their over consumption of natural resources.

Ongong’a (1999:61) rightly observes that human beings are stewards of the world. He emphasizes that human beings are only tenants; God himself remains the “Landlord” the Lord of all creation. Christians should not be masters over the environment and natural resources. They should be involved in the utilization and protection of natural resources in order to allow them regenerate and be of use in the future. The Catholic Church emphasizes that the faithful should realize that they have a responsibility within creation and their duty towards nature as an essential part of their faith.

Obeng (1999) Gecaga (1999) and Zimmerli (1971) observe that human beings have a special position in creation and are dependent on its creator. They have a personal relationship with nature. They further emphasize that humanity has to rule the creation with care and knowledge. This emphasis leads to a profoundly holistic worldview, in which humans take their place with every other creature in a state of utter dependence on God. Furthermore, all these creatures are expected to work together to accomplish the good purpose of creation. Christians must therefore preserve the particular goodness of plants, water, soil, animals, and mineral resources. Misuse of these resources would bring disastrous consequences to human beings and their environment. Environmental degradation destroys creation given to humanity by God as something indispensable for human life and their development. Human beings, therefore, have a duty to make good
use of the natural resources. The study sought to relate these studies on human activities in creation to the teachings of the Catholic Church on environmental conservation in Kericho County.

The above literature review has highlighted the Catholic Church insights that provide guidance on how the human person can best relate with nature. It is apparent that Christians are best placed to spearhead grass root environmental conservation and establishment of suitable environmental guidelines because of their capacity as members of the society.

**1.8.3 THE ROLE OF THE CHURCH IN ENVIRONMENTAL CONSERVATION**

Blake (1996:198) notes that a distinctively Catholic church’s contribution to contemporary environmental awareness arises from the understanding of human beings as part of nature. She further emphasizes that, Catholics look to nature for indications of God's existence and purpose. With such limits in mind, Pope John Paul II in *Hundredth Year* argued that in addition to protecting natural ecosystems and other species, humanity safeguards the proper use of the resources of the earth intended for all. In addition, Blake notes that the National Catholic Rural Life Conferences and the Catholic Relief Services continue to urge for great respect for the land; advocate sustainable agricultural practices; prevent soil loss and water pollution; promote a fair living for those who work in the land; and to assist religious communities and local churches in the management of the farms, forests, and wetlands they hold. They also enhance the Church's commitment to proper use of technology in its rural development projects, which aim at sustainable agriculture and community-based development.
Pope Benedict XVI (2010) in his Encyclical letter, “The source of life is caring, no.51” argues that the Catholic Church has a responsibility towards conservation and care for creation. He further points out that the church considers it her duty to exercise that responsibility in public life, in order to protect the earth, water and air as gifts of God the creator meant for everyone.

Getui (1993:44) and Obeng (1999:21) argue that for any tangible results to be realized towards a healthy environment there is need for individual and collective effort. The role of each individual Christian, singly and collectively, is essential. They are of the view that Churches are creation awareness centres which must educate their congregations on individual responsibilities towards the environment. They emphasize that the Church’s role in environmental conservation is important and demanding. Churches are challenged to teach and expect their members to recognize and appreciate the providence of God. They argue that destroying the environment is sinning against the essential cosmic dimension of creation and redemption. The foregoing literature is important because of the gradual environmental degradation witnessed in Kericho County and thus makes the case of the importance of the Church in environmental conservation relevant.

Bennett (2006:74) notes that the goods of the earth are gifts from God, and they are intended by God for the benefit of everyone. Christians have a reason, duty and responsibility to care and conserve the environment as stewards and trustees, not as mere consumers and users. He argues that land is a precious resource which the present generation has inherited and which must be preserved for future generations. He further
points out that the way we care for these natural resources is a measure of our stewardship and a sign of our respect for the Creator.

Christiansen and Grazer (1996:191) emphasize that, from the point of view of the Catholic social teaching, sustainable development is a requirement for the planetary common good. They further note that there are moral imperatives both to preserve and manage the environment for future generations and to ensure that humanity’s contemporaries live with dignity.

Hessel (1996:144) argues that environmental crisis requires a major rethinking of relationship of humans to the earth. He further emphasizes that economic, social and political programs are instrumental in creating long term policies for environmental protection and survival. Likewise, religious and philosophical attitudes will also be crucial to rethinking the future of human-earth relationship. It requires broader philosophical and religious understandings of ourselves as creatures of nature, embedded in life cycles and dependent on ecosystems. Christians and the Church have an integral contribution to make to the quest for the protection and care of the environment. The church should agitate for a healthy co-existence between humanity and the natural environment. This will benefit both nature and human beings as a whole as they will enjoy and experience God’s presence in a well managed environment. Through conserving and protecting natural resources such as water sheds, forests, air and vegetative cover, the church will have contributed immensely towards a healthy earth as well a healthy society.
Vicky (1992:120) observes that in order for the Church to curb environmental pollution that humans are experiencing, critical attention must be focused on environmental conservation. She further points out that human greed and extravagant lifestyles are directly responsible for much of the damage to our environment. Human kind needs to re-examine their actions and priorities very carefully. What is urgently required is active participation by individuals in protecting and creating awareness on environmental care. The Catholic Church must face the real issues of poverty, greed, corruption, and ignorance in order to create an environmentally friendly society. She should mobilize people to work together for common goals, be they healthful environments, food security or other aspects of environmental protection.

Boff (1995:14) notes that it is impossible to develop an adequate respect for nature without taking into account the way in which nature adversely affects important creatures, such as marginalized and impoverished human beings. This situation of social injustice includes an element of ecological injustice. This is manifested in the wanton destruction of the natural resources and pollution of the environment. He further points out that the authentic notion of ecology is always holistic and maintains an alliance of solidarity with nature. The foregoing studies highlight the challenges faced by the church in fostering environmental conservation.
1.8.4 CONCEPTUAL FRAMEWORK

The past century has witnessed not only unprecedented economic growth and prosperity but also unprecedented degradation of the environment. The role of human beings in enhancing conservation and protection of the environment has been considered from several perspectives. The study has utilized the liberative solidarity model developed by Abraham, K.C (1994). Liberative solidarity constitutes: solidarity with the weakest part of the whole creation; environmental stewardship in the earth community; option for the poor and justice for the poor which emphasizes that the ecological problem is intimately connected to justice for the poor; and finally eco-feminism which emphasizes the connectedness between women and nature, as between humanity and nature.

Abraham (1994) argues that liberative solidarity model calls for the Church to be in solidarity with the weakest part of the whole creation. The roots of this contemporary model are in the Bible. Liberation theologians, such as Gustavo (1973) have forcefully articulated the biblical motif for liberation in Exodus and other passages. Liberation allows for a biblical approach which inspires the presence and action of human beings in history. In the Bible, Christ is presented as the one who brings us liberation. Christ the saviour liberates human beings from sin, which is the ultimate root of all disruption of friendship and of all injustices and oppression. He affirms that liberation witnessed in the Bible includes liberation for creation. There is unity between the hope for the inward liberation of the children of God and liberation of the entire physical creation from its bondage and oppression.
Abraham (1994) further notes that there is something common to the interpretation of liberation as a historical process in the Exodus and the liberation process of creation in Romans. The former is linked to the cry of the oppressed (Exodus 3:7); the latter is promised in response to the groans and travails within human beings and in creation (Romans 8:22). In the same manner, the renewal of the earth comes in response to the cry of the poor and of the dumb creatures of silent nature.

Msafiri (2007) echoing Abraham rightly observes that the principle of liberative solidarity demands active unity and cooperation among all humans, particularly between the weakest and the poorest. Msafiri points out that liberative solidarity entails a firm and persevering determination to commit oneself to the common good of all, because human beings are responsible for all. The following constitute the basic aspects of the ecological principle of liberative solidarity model (see fig.1.1).

First, the principle of liberative solidarity embraces all components of the earth community, that is, humanity and the biosphere. Together as humans we are experiencing an indivisible ecological solidarity and interdependence. The environmental crisis has become a global problem. Human beings should recognize that every form of life has value regardless of its worth to human beings. The impending environmental crisis urges human beings to become even more aware of our global citizenship and solidarity. This is a condition against the worsening ecological crises which threaten the welfare and future survival of life on this planet (Msafiri 2007:94).

The second principle, according to McHugh (1996) opts for a new ecological solidarity which promotes life and environmental stewardship in the earth community. He
emphasizes that protection of the environment demands a more coordinated approach to
the management of the earth’s goods to meet the needs and legitimate aspirations of the
people.

The third principle of liberative solidarity model offers important ethical criteria whose
primary aim is to protect the weaker and threatened individuals and units. Protection
and conservation of the environment is part of this. Fundamental option with and to the
poor is an integral element of the principle of liberative solidarity. Liberative solidarity
is committed not only to our relationship with one another, but also our relationship
with nature and the universe. It is also committed to the struggle for the transformation
of the poor, the weak, the disfigured and the overexploited nature. Option for the poor
means option for the environment.

The ecological problem is also intimately connected to justice for the poor (Christiansen
and Grazer 1996). The poor of the earth offer a special test of human’s solidarity. There
are painful adjustments we have to undertake in our own economies for the sake of the
environment which must not diminish our sensitivity to the needs of the poor. In most
countries today, including Kenya, it is the poor who most directly bear the burden of
current environmental destruction. Their lands and neighbourhoods are more likely to
be polluted or to host toxic waste dumps, their water contaminated, and their children to
be harmed by infectious diseases. Caught in a spiral of poverty and environmental
degradation, poor people suffer acutely from the loss of soil fertility, pollution of rivers
and the destruction of forest resources.
Fig.1.1 The paradigm model illustrating Liberative Solidarity Model.

The unity of love to God and neighbor (a religious basic norm)

The principle of stewardship

The principle of option for the poor

The principle of eco-feminism

Subsidiary organized through solidarity

Liberation of the Environment

(Source: Aidan Msafiri 2007: 96)

The fourth principle is elaborated by proponents of eco-feminism such as Aruna (1994) and Ruether (1994) who also argue that eco-feminist vision challenges limited views of development that measure the value of the gifts of creation only in terms of their use in the market place. Many of the environmental resources human beings should value like the clean air we breathe, the poetry of a tree or mountain are excluded from economic
measurement. Yet their exploitation or destruction and the cost of cleaning up after the
destruction are labelled growth and production.

According to Ruether, an eco-feminist vision affirms the sacredness of all Gods gifts in
creation, the animate and the inanimate. It rejects the anthropocentric worldviews,
which legitimises and even seek biblical sanction for the extraction of more and more
from the life-giving Mother Earth. In his teachings and ministry, Jesus drew inspiration
from little things of life in - a lily in the field, a stone, a child, a mustard seed, grains of
wheat, fish, and loaves of bread, pigs, spit and mud, and the birds in the air. Women in
their daily lives have also been in close contact with life’s little things, tending,
conserving and caring for an environment which will enhance the growth and health of
their families or communities. The new insights provided by the participation of women
in the struggle to save the earth makes it clear that, women contribute not in passive
resignation to the hard life they bear, but in creative actions for sustaining life.

The earth our Mother cries out for protection and liberation from senseless acts of
aggression in the name of progress and development. The church and all concerned
people will have to heed the voice of women before it is too late. While there is an
acknowledgement that there are varied models and approaches of environmental
conservation and management, the study is guided by a liberative solidarity model.
1.9.0 RESEARCH METHODOLOGY

1.9.1 RESEARCH DESIGN

The research design employed in this study is descriptive survey. Descriptive survey was used to obtain information concerning the current environmental situation in Kericho County. Descriptive survey includes a detailed account of the context, the activities, the participants, and processes. The goal of the study was to describe the role of the Catholic Church in environmental conservation in Kericho County. The research work itself is predominantly qualitative. The researcher collected information from respondents on their attitudes and opinions in relation to the role of the Catholic Church in environmental conservation in Kericho County. The researcher gathered both primary and secondary data. Primary data was obtained from field research using questionnaire, interviews, participant observation and Focused Group Discussions (FGDs). Secondary data was generated from published materials, internet, journals and books.

Qualitative methods of data analysis were used to analyze the data. This involved description, interpretation and synthesis of data. Data from the field is qualitative while the secondary data is descriptive.
1.9.2 STUDY AREA

The study was carried out in Kericho County, Kenya. The County is located to the South West of the country and lies within the highlands west of the Great Rift Valley. This County was selected because of the continued degradation of the critical natural resources which poses a threat to the social and economic life of the people. The main economic activities in this region include tea farming and processing, maize plantations, quarrying, livestock keeping, and saw milling. These economic activities have led to overuse or destruction of the environmental resource. Kericho County occupies a total area of 2,111 Km². The population of the County is estimated to be 752,396 as per the 2009 population census. Administratively, the county has 15 divisions (Refer to Appendix 4) (https://en.m.wikipedia.org/wiki/kericho_county).

Owing to the fact that the County is considerably large, the study focused on three divisions (Refer to Appendix 4) namely: Ainamoi division which hosts over twenty tea factories, which includes Unilever and James Finlay multi-national tea companies. Londiani division borders the Mau Complex water catchment. It also occupies the area covering Londiani forest. Bureti division is mainly occupied by small scale tea farmers and therefore a few tea factories are located in this area. These three divisions have continued to experience environmental degradation and the destruction of natural resources. Increased human population in these areas has continually exerted pressure on natural resources thus depleting it.
1.9.3 TARGET POPULATION

Kericho County is home to numerous Christian denominations including the African Inland church (AIC), African Gospel Church (AGC), Catholic Church, Anglican Church, Seventh Day Adventist Church, Full Gospel Churches of Kenya and a host of Independent churches or African Instituted Churches (AICs). The study distinctly focused on the Catholic Church in Kericho County, since it is well established and deeply rooted. Population distribution in Kericho County correlates with land potential. The most densely populated areas are the high and medium potential zones while the lowest population density is found in the semi arid areas.

The Catholic Diocese of Kericho has an estimated population of 234,335 (See Appendix 2) which is estimated to be 15% of the total population in the county (www.scridb.catholic-hierarchy.org/diocese/dkeri.html). The target population comprised of six key groups: government officials, clergy and parishioners, community leaders, farmers, saw-millers and miners.

1.9.4 SAMPLING PROCEDURES

The study drew respondents from various stake holders within the Catholic diocese of Kericho. The first category comprised of government officials. Purposive sampling was used to select respondents for this category. This involved three Divisional Environmental Officers and three Divisional Agricultural Officers each from Bureti, Ainamoi and Londiani divisions. These officers were interviewed to provide information relevant for the study.
The second group of respondents was drawn by purposive sampling from the Catholic Diocese of Kericho. These included the bishop, six priests in charge of the six parishes within Ainamoi, Londiani and Bureti divisions, and two deacons from each of the six parishes, making a total of twelve deacons. The researcher employed purposive sampling method for this category. These categories provided information on the teachings of the Catholic Church on environmental conservation and management. They also gave information on the contribution of the Catholic Church in environmental conservation. Two Catholic development officers based at the diocesan headquarters in Kericho were also part of the respondents. Under the church parishioners, the researcher used simple random sampling technique to identify ten parishioners from each of the six parishes to participate in the study. The researcher administered questionnaires in order to draw information from these respondents.

The targeted community leaders who worship in the Catholic Church included three categories namely: village elders, youth, and women leaders. The researcher employed quota sampling in picking three leaders from each of the three named categories, from the three divisions. The number of respondents in this category was twenty seven.

The last three categories of respondents include the farmers, saw millers and miners who are members of the Catholic Church. The researcher used simple random sampling technique to identify five farmers, five saw-millers and five miners from each of the three divisions to participate in the FGDs. The number of respondents in this category
was forty five. These category of respondents provided data on the causes of environmental degradation.

Since the sample included appropriate stakeholders in environmental conservation, all the information to the study was acquired. More so, it helped in meeting the study’s objectives. The table below shows the parishes within the three divisions.

Fig.1.2 Summary Distributions of Parishes.

<table>
<thead>
<tr>
<th>Division</th>
<th>Parishes</th>
<th>Churches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bureti</td>
<td>Litein</td>
<td>Litein</td>
</tr>
<tr>
<td></td>
<td>Roret</td>
<td>Roret</td>
</tr>
<tr>
<td>Ainamoi</td>
<td>Kericho Cathedral</td>
<td>Kericho Cathedral</td>
</tr>
<tr>
<td></td>
<td>Keongo</td>
<td>Keongo</td>
</tr>
<tr>
<td></td>
<td>Matobo</td>
<td>Matobo</td>
</tr>
<tr>
<td>Londiani</td>
<td>Londiani</td>
<td>Londiani</td>
</tr>
<tr>
<td></td>
<td>Kipkelion</td>
<td>Kipkelion</td>
</tr>
</tbody>
</table>

Fig.1.3 Summary Distribution of Respondents.

<table>
<thead>
<tr>
<th>Study Area</th>
<th>Respondents Selected</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Officials</td>
<td>-Divisional Environment Officers.</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>-Divisional Agricultural Extension Officer</td>
<td>3</td>
</tr>
<tr>
<td>Catholic Diocese of Kericho</td>
<td>-Clergy(bishop, priests)</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>-Church Deacons</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>-Local Parishioners</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>-Catholic Development Officers</td>
<td>2</td>
</tr>
<tr>
<td>Community Leaders</td>
<td>-Village Elders</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>-Youth Leaders</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>-Women Leaders</td>
<td>9</td>
</tr>
<tr>
<td>Farming</td>
<td>-Famers</td>
<td>15</td>
</tr>
<tr>
<td>Business community</td>
<td>-Saw-millers</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>-Miners</td>
<td>15</td>
</tr>
<tr>
<td>Sample size(Total)</td>
<td></td>
<td>159</td>
</tr>
</tbody>
</table>
1.9.5 RESEARCH INSTRUMENTS

The research instruments used in the study included the following:

**Questionnaire:** Both open and closed questions were used in order to aid the respondents to arrive at specific answers (See appendix.1). The questionnaires were administered on different dates to 60 local parishioners, community leaders, farmers and saw millers in the three divisions who provided relevant information for the study. The researcher gave time to the respondents to complete answering the questionnaires. The questionnaires were collected after the given response time was over.

**Interviews:** The study used both structured and unstructured interviews to obtain information from the following categories of respondents: government officials, the clergy and the Catholic development officers based at the diocesan headquarters in Kericho (See appendix.1). The researcher identified the respondents using purposive sampling and approached them in order to request them to participate in the study. The respondents were requested to answer certain questions. The data was recorded by use of tapes and notes.

1.9.6 DATA ANALYSIS

Qualitative methods of data analysis were used. This involved description, classification, interpretation and synthesis of data. Field data were summarized and recorded in cards. The primary data was then integrated with secondary data. Guided by the objectives and the premises of the study, the raw data was collated and arranged thematically.
To ease data analysis, questionnaires and interviews were coded guided by the objectives. The main observations were synthesized and conclusions drawn. Major findings, recommendations and suggestions on issues covered in the objectives of the study have been presented.

1.9.7 DATA MANAGEMENT AND ETHICAL CONSIDERATIONS

In this study, consent from the potential respondent and the Catholic Diocese of Kericho was obtained. Permission was obtained from the research subjects, the survey respondents in order to collect data from them. This was done in non-coercive ways worked out through the use of informed consent. Anonymity was ensured in order to protect the research subjects and the quality of data. The respondents were not compelled to reveal their identity at any time, this ensured that their protection was guaranteed, and they felt free to give truthful answers. Except with the consent of the participants, confidentiality of their identity and data throughout the research was adhered to.

Also, where it was possible, potential participants were informed in advance of any features of the research that might reasonably be expected to influence their willingness to take part in the study. Openness and honesty about the research, its purpose and application was put into consideration. An account of the purpose of the study as well as its procedures was provided by the researcher.

The researcher honoured patents, copyrights, and other forms of intellectual property while giving proper credit for all contributions to research.
Throughout the study, clear and accurate records of the research procedures followed and the results obtained, including interim results were kept. This was necessary not only as a means of demonstrating proper research practice, but also in case questions are subsequently asked about either the conduct of the research or the results obtained.

For similar reasons, the data which was generated in the course of research was kept securely in paper and electronic form, as appropriate.

Availability of data to other researchers through widely-searched repositories will be made so as to demonstrate continued use of the data and relevance of the research. The researcher will publish his work in order to advance research and scholarship.
CHAPTER TWO

ENVIRONMENTAL DEGRADATION IN KERICHO COUNTY

Increased pressure on natural resources and demand for natural resources like land, timber, energy, water and forests has more than doubled. Meeting human needs for food has resulted in massive alteration of natural environment leading to severe and widespread environmental degradation including the pollution of land, water, and air, soil erosion and loss of fertility, depletion of water resources and deforestation. This chapter gives a critical analysis of the root causes and forms of environmental degradation in Kericho County.

2.1 Causes of Soil Degradation

Soil depletion results from the loss of the top soil through poor farming methods, felling of trees and overgrazing. Poor cultivation methods, particularly on the slopes of mountains and highland regions, has caused severe run-off of soil minerals and micro-organisms necessary for plant growth and sustainability. Destructive farming methods have accelerated the rate and magnitude of soil depletion and erosion (Wangiri 1999:78). The research findings show that prolonged poor agricultural practices have contributed to declining soil fertility especially in the mountainous and highland regions of Londiani division. Kirui (O.I. 24-06-2013) observed that poor farming methods, for example ploughing along the contours have contributed to soil depletion. Farmers are encouraged to plough across the contours and build terraces. Mutai (O.I. 14-11-2012) noted that the need to produce adequately for an ever rapidly increasing population in the county has resulted in the cultivation of land more
intensively. Furthermore he observed that population pressure has resulted in the cultivation of water catchment areas and preserved swamps, such as Chelilis swamp. In the process, the land has failed to get time to regenerate its soil fertility and with continuous production, the fertility diminishes, resulting into reduced productivity.

The researcher noted that massive use of chemical fertilizers on crops such as maize, tea, and others has led to severe soil pollution in Kericho County, causing a quantitative decline in crop yield. The farmers who were interviewed at Kapcheptoror in Ainamoi division stated that they often use inorganic fertilizers in their farms. At least 74 percent of the informants argued that they use chemical fertilizers to improve the productivity of their farms. Although the respondents gave varied responses, they were in agreement that heavier fertilizer inputs deplete the soil by polluting it. According to Ruto (O.I 18:04-2013), the destruction of the soil and consumption of arable land makes agriculture very expensive and unrewarding. Instead farmers should be encouraged to use organic manure to avoid pollution of soil.

Scientific evidence shows that prolonged use of chemical fertilizers like Ammonium Sulphate (Urea) alters soil acidity, alkalinity and salinity. Chemical fertilizers and pesticides poison and weaken the soil posing a great disaster for the health of the earth and living things (Rayan 1994, FAO 1994 and Msafiri 2007). This destabilizes natural soil nutrients, necessary for plant life and growth. Farmers in this region rely upon an ever increasing use of chemical fertilizers to improve soil fertility and in some cases they use pesticides .These chemicals additives contaminate the underground aquifer and they constitute a grave hazard to the health of human beings through the food chain.
Philip, a parishioner at Litein parish (O.I 18-06-2013) pointed out that individual farmers must ensure proper use and disposal of farm chemicals; for example, fertilizers, acaricides, pesticides, and herbicides to avoid polluting soil and water. Jane (O.I 22-05-2013) underscored that farmers should not use excess and harmful chemicals to destroy pests.

In the study area, it was noted that soil erosion and degradation occurs in several parts and is caused by wind and water activity, for example, the wind blows off the rich top soils during dry seasons. Mutai (O.I. 14-11-2012) reported that water runoff carries the top soil away; this occurs during seasons of heavy rains. Furthermore displacement of top soil by wind action is more widespread during dry seasons. He further attributed this to loss of vegetative cover and cutting down of trees. The destruction of vegetative cover further culminates in soil erosion. When the forests are cleared soil erosion sets in and in many places the soil becomes useless. The loss of topsoil reduces fertility because as the soil becomes denser and thinner, it is less penetrable by growing roots (Blake 1996:240). The capacity of the soil to retain water and make it available to plants is reduced. The plant nutrients are also washed away with soil particles.

2.2 Causes of Degradation of Forests Reserves and Vegetative Cover

Conversion of forested land to agricultural land and other uses has been a common occurrence in Kenya over several decades. The worrisome state of affairs is not only restricted to private land, but also to gazetted forests. Deforestation in Kenya is both attributed to illegal activities by actors and government sanctioned forest excisions (NEMA 2011:20). The parishioners who responded to the question on the cause of
environmental degradation gave varied factors that are responsible for paltry tree cover in Kericho County. At least 89 percent of the informants attributed the cause of deforestation to illegal logging to meet timber and charcoal needs, and 11 percent of the informants mentioned that population pressure leads to the clearing of forests for agricultural and residential purposes. Deforestation destroys habitats of many animals, important trees which are a source of herbal medicine and it also affects water cycle. Conserved forests and areas protect rare and endangered species like Elgon teak which may be destroyed and become extinct. The photograph below (see figure 2.1) shows trees that have been cut down for local timber consumption at Kapsenelwet location in Bureti division. Eucalyptus trees are usually sold by the local people to the nearby tea factories and learning institutions as firewood. Fig. 2.1 Harvesting of trees for Timber and Logs in Bureti.

![Photo taken on 14.02.2013 at Kapsenelwet, Bureti Division](image)
The direct cause of deforestation is agriculture, logging for timber, cattle ranching and large scale development projects (FAO 1983, Cooper and Palmer 1992 and Blake 1996). The research revealed that agriculture is one of the significant causes of deforestation in Kericho County. In an interview schedule administered to the village elders in Londiani, they concurred that some people had encroached forest reserves in search of fertile land for agriculture, for example, in the Mau and Londiani forests. The situation is further worsened by total dependence on firewood and charcoal as the main source of energy. The cutting down of forests is destroying the natural habitat of thousands of living forms (Gecaga 1999 and Msafiri 2007). Sir Philip (O.I 18-06-2013) rightly observed that residents of Kericho County should be challenged to use alternative source of fuel, for example, solar energy to reduce cutting of forest for firewood.

The researcher noted that saw millers in Kericho County obtain licenses to permit them to practice logging especially within the conserved forest of Mau, a good example is in Kedowa. The figure 2.2 shows logging taking place in Kedowa.
The research revealed that saw-milling was practiced in Soget Location in Londiani division. In an interview schedule administered to saw millers, 89 percent of the respondents admitted that they have to pay logging fees to the forest department in order to obtain permits. However, the researcher noted that the charges were very low and did not reflect the current economic situation. In addition the saw-millers do not stick to the guidelines on logging as they only get minimal supervision from the forest department. The Forest department does not have the mechanisms to enforce its rules and regulations due to inadequate staffing and funding. Kirui (O.I. 24-06-2013) pointed out that there is no established allowable number of trees to be cut annually. He further noted that those who had been licensed to cut some trees from the forest usually overexploit it as they also destroyed other trees that have not matured.
It was observed in the study that bush fires are common phenomenon in many parts of Kericho County. The farmers who were interviewed gave varied information as to what causes the bush or forest fires. Talam (O.I 22-04-2013) and Koech (O.I 22-04-2013) attributed these to the clearing of land for cultivation or grazing. Further, they observed that charcoal burners and those intending to settle in the forest set the vegetation on fire. The photograph below (see figure 2.3) shows a section of the Ting’oro forest being cleared in Londiani.

Fig. 2.3 Ting’oro forest being cleared for charcoal burning.

Photo taken on 22.03.2013

The fires spread extensively and cause a lot of damage to the forest biodiversity. Charcoal burners also destroy the forest as they use traditional kilns which are not energy efficient. These activities are done illegally and therefore no one controls or
tends the fire which in most cases destroys the areas surrounding the charcoal burning sites. The smoke pollutes the air intensively. This has caused substantial damage to the county’s woodlands, trees, forests and environment as a whole. According to Talam (O.I 22-04-2013), people consciously set their fields on fire after the harvest period as a traditional method of clearing weeds before the next planting season. This practice is particularly common in Kipkelion location. Farmers set their farms on fire when preparing to cultivate for the next planting season. The fire clears the weeds and makes it easy for the oxen to plough over the sloppy area (Koech O.I 22-04-2013).

Forests may be cleared simply to make room for cultivation, pasture, or settlement. Wood serves a vital role as a source of fuel, for construction, and as an industrial raw material. Forests play an important role in the maintenance of the ecosystem (Meyer 1996 and Msafiri 2007).

The foregoing discussion shows that the most pressing problems are the high rate of loss of vegetative cover resulting from a combination of deforestation, overgrazing and slash and burn cultivation.

2.3 Pollution of Fresh Water

Air pollution has repercussions for the water. Clouds are contaminated by fossils fuels burned in homes, and in factories, and they produce acid rain. Acid rain has a devastating effect on people, vegetation and animals.

Rivers are dumping places for garbage, especially in Kericho town. The observations made in the study showed that in rural areas of Kericho County, people generally share rivers with domestic and wild animals, for example at Chemosit River. They bathe and
wash in rivers using soaps which contain chemicals. Worse still, containers used for spraying chemicals on plants are washed in rivers. This further contaminates water in this river, which is one of the largest in Kericho county draining water to Lake Victoria. The photograph below (See figure 2.4) shows vehicles being washed at Chemosit River. At the same time, water for domestic use is fetched from the same river.

Fig.2.4 Vehicles being washed and fetching of water for domestic use at bank of river Chemosit.

Soil erosion too pollutes water. The top soil that is washed off into rivers and streams contains chemicals residues from pesticides, herbicides and fertilizers. In so doing the vegetation, animals and human beings are poisoned ((Rayan 1994 and Wangiri 1999).
Ruto (O.I 18:04-2013) observed that poor farming methods, for example, ploughing along the contours contributes significantly to soil erosion which pollutes water in the streams. Ruto, further notes that cultivating near water catchment areas has led to drying up of sources of water. The belt area from the water sources and the riparian strips that was to be protected has been cultivated. This is a violation of Legal notice no.19 of 2009 on the protection of riverbanks and wetlands. He noted that planting of exotic trees, for example eucalyptus trees, along water sources had consumed a lot of water (Ruto O.I 18:04-2013). The high water usage by eucalyptus trees and its competitive nature may reduce growth of crops and other trees on the farm by altering the availability of growth resources such as water. If eucalyptus trees are planted near waterbeds, their roots sense the presence of moisture, and will thus open the stomata very wide allowing a lot of water to be lost from the soil. Therefore planting of eucalyptus species in water limited areas should be discouraged.

The research findings show that the rate of water pollution in Kericho County is increasing. This poses a serious threat to human health and aquatic life. Gladys (O.I 25.11.2012) observed that pollution of water had destroyed marine life such as fish and also spreads water-borne diseases such as cholera to human beings. People use contaminated water from Nyakacho stream near Kericho town for domestic purposes as well as for drinking. Furthermore she noted that people bathe, wash clothes and clean cars in rivers and streams hence contaminating the water.

In the study area, 52 percent of the parishioners noted that dirty water from homes and sewage systems is channeled or directed into water sources. These include springs,
water furrows, wells, rivers and underground water. The increased and widespread rate of water pollution has far-reaching negative health and environmental consequences. Pollution of soil, air and water destroys marine life such as fish and microorganisms in the soil and also spreads water-borne diseases such as cholera to human beings.

The photograph below (Refer to figure 2.5) shows dirty water from homes, solid toxic and hazardous waste channeled into nearby Nyakacho stream in Kericho Town.

Fig.2.5 Dirty water from homes, solid toxic and hazardous waste being channeled into the nearby stream in Kericho Town.

![Photo taken on 8.02.2013](image)

The foregoing discussions confirm that there are visible signs of increased water pollution, above all through washing and bathing in rivers, soil erosion and widespread dumping of dangerous wastes and dirty water into fresh water sources.
Fig. 2.6 The pie chart below shows that an overwhelming majority of the respondents, at 98%, are aware of the causes of environmental degradation in Kericho County. Only 2% of the respondents mentioned that they were not aware of the causes of environmental degradation.

Fig. 2.7 The graph below shows an analysis of the causes of environmental degradation in Kericho County.

<table>
<thead>
<tr>
<th>Percentage of Respondents</th>
<th>Deforestation</th>
<th>Poor Farming</th>
<th>Infrastructure Development</th>
<th>Industrial Waste</th>
<th>Mining</th>
<th>Green House Emission</th>
<th>Industrial Smoke</th>
<th>Over-Grazing</th>
</tr>
</thead>
<tbody>
<tr>
<td>89</td>
<td>74</td>
<td>33</td>
<td>52</td>
<td>23</td>
<td>18</td>
<td>64</td>
<td>52</td>
<td></td>
</tr>
</tbody>
</table>
Figure 2.7 illustrates the causes of environmental degradation in Kericho County. As fig.2.7 illustrates, respondents reported that the following were the main causes of environmental degradation in Kericho County: deforestation 88%, poor farming methods 73%, infrastructure development 33%, industrial Waste 52%, mining 23%, greenhouse emission 18%, industrial smoke 62% and overgrazing at 52%. The above findings established that deforestation and poor farming methods were the major causes of environmental degradation in Kericho County.

2.4 Overstocking

Overstocking has been worsened by the keeping and grazing of large herds of cattle, goats, sheep and donkeys in the very same areas. The Kipsigis community has a strong pastoral background which they have maintained up to the present day. They still view cattle as a status symbol and an important source of wealth and security, regardless of the quality of the animals. Overgrazing has many destructive environmental consequences. Observations made during the study showed that overstocking is a serious problem in the county. Overgrazing has resulted in the total depletion of the natural vegetation. It has rendered most top soils bare and sandy, thus making plant life and survival impossible. Sang (O.I. 7-05-2013) pointed out that the value placed on cattle by the Kipsigis has encouraged overstocking and this has led to overgrazing. He notes that overgrazing has loosed the top soil and caused soil erosion by water runoff or wind.
The researcher noted that there is excessive pressure on vegetation cover caused by livestock in arable areas of Kericho County. The researcher observed that in the study area rearing of domestic animals, for example cattle, sheep and goats, are an economic activity. More than 52 percent of the farmers in Ainamoi division were in agreement that the increase in livestock has led to the decline in the fertility of land. When more animals compete for the same pasture, they may exceed the productivity of the area and destroy the vegetation cover thus accelerating erosion.

Large numbers of cattle and sheep tend to build up during years of normal rainfall, and are difficult to support during the years of drought. When the inevitable drought approaches, grazers are naturally reluctant to cut back on herds after a single dry year. When it becomes apparent that the drought will be prolonged and serious, many ranges are already overgrazed (FAO, 1983). Koskey (O.I 4.06.2012) observed that herders usually drive their animals into the nearby Mau forest for grazing during the dry seasons when the pasture in the area is inadequate. Koskey attributed this to the large herd of animals.

2.5 Air Pollution

Air is getting its full share of destruction. Oxygen is being replaced with toxic substances such as methane, carbon dioxide and nitrogen. These polluting gases result from burning of fossil fuel; agricultural practices; deforestation and industrial waste (Wangiri 1999:77).
The health of many is subjected to an increasing threat of air pollution. This is particularly due to recent efforts by both government and private sector to promote industrial manufacturing in the country. Among other factors, liberalization of the private sector and a free market economy has led to a notable increase of industries and motor vehicles. Chemicals in industry and agriculture are polluting the air, water and soil (Rayan 1994 and Gecaga 1999).

The researcher observed that polluting effluences and emissions from the tea factories in Kericho County have increasingly led to pollution of the air, particularly Litein, Kapkatet and Chelal factories in Bueti division.

While these are the major categories, virtually all other production activities emit air pollutants from the combustion of fuels and the handling of raw materials, solvents and other chemicals. According to Maritim (O.I 23-02-2013), Smoke emissions from vehicles in Kericho town pollute the air. He added that multinational tea companies such as Unilever and James Finlay use aircrafts to spray their tea plantation, thus contributing to the pollution of the air.

2.6 Poor Waste Disposal

A great deal of waste generated is illegally dumped in open spaces leading to physical accumulation or its discharge to fresh water as effluents. According to Ainamoi divisional environmental officer, waste management is a great challenge to Kericho County due to the absence of appropriate technologies and modern facilities for collecting, recycling and treating waste (Obura O.I. 17.01.2013). He further notes that
improper waste disposal in Kericho County has also enhanced land degradation and reduced the quality of the environment.

Observations in the study also showed that reckless disposal of garbage is common in Kericho town, Ainamoi division. This includes household and industrial wastes. This problem is reaching critical levels. Heaps of plastic papers and materials are found in open spaces, between residential houses and market places in Kericho town as shown in the photographs in figure 2.7 and 2.8.

Fig.2.7 Improper waste disposal at Kericho dumpsite. Waste is dumped in an open ground.

![Improper waste disposal at Kericho dumpsite](image)

Photo taken on 8.02.2013
Fig. 2.8 Heaps of waste materials accumulate outside Kericho market. The waste is collected after some days by the county workers.

Photo taken on 8.02.2013

It was noted by the researcher that plastic bags make up a huge part of the waste. Plastic bags are considered convenient, cheap and water proof. Plastic bags do not decompose when disposed. If plastics are swallowed, they cause death to cattle, birds, and fish. Obura (O.I. 17.01.2013) pointed out that there is lack of recycling facilities and technology, especially inorganic materials like plastics and polythenes which pollute the environment. Furthermore, papers are not recycled. Uncollected garbage also blocks drainage channels thus increases health problems related to flooding and waterlogged soils.
2.7 Poverty and Environmental Degradation

Poverty exacerbates environmental degradation in a number of ways. The UNDP (2010) report on Socio-Economic Status, Poverty, Gender and Environment, notes that poverty compels the poor to inhabit or cultivate ecologically fragile landscape such as forests, wetlands, lakeshores, hillsides, and animal irrigation corridors. This has disastrous consequences for biodiversity and ecosystems (NEMA, 2011).

Caught in a spiral poverty and environmental degradation, poor people suffer acutely from the loss of soil fertility, pollution of rivers, urban streets, and the destruction of forest resources. Cheruiyot (O.I. 02-05-2013) cited that poverty is a cause of environmental degradation in Londiani division. He observed that, poverty, overcrowding and unequal distribution of land often forces them to overwork the soil, encroach and clear the nearby Mau forest.

The efforts of the poor people to eke out a bare existence adds in its own way to environmental degradation and not infrequently to disaster for themselves and others who are equally poor (USCC 1996:225).

The extreme poverty poses a threat to the environment in Kericho County. Observations showed that in the rural areas of Ainamoi, farmers are cutting down on fallow periods due to scarcity of land. Hence, there is overuse of available land, so the soil is exhausted and yields fall. Modern agricultural methods, like the use of fertilizers could compensate for this but the inputs are expensive and thus beyond the means for the poor farmers. The fallow periods are insufficient for trees to grow and this leads to soil erosion. The people in the rural areas are often forced to cut down trees for fuel.
Although this is a poor source of fuel, the people have no alternative, thus worsening deforestation and encouraging erosion (Obeng 1999:17). The struggle to earn a living and a minimum of life’s basic needs have been the main cause of Wanton cutting of natural trees and forests for making charcoal for sell.

Poor persons with no access to monetized economy are forced to depend entirely on the gifts of Mother Earth. But land, water, forests and other areas are polluted or destroyed. The poor are inclined to destroy their immediate environment simply to survive (McFague 1979 and Msafiri 2007). Unless the poor have alternative sources of food and basic needs like fuel, they too will wantonly destroy whatever environment is around them. According to Ronoh (O.I. 4-02-2013) destruction of forest would reduce the amount of rain received annually, hence lead to food shortage and poor living standards in the area. He adds that contamination of water affects the health of living things.

The living conditions of such vulnerable people lead them to exploit the existing natural resources to guarantee their survival. In many rural areas for example, people engage in land excavation, cutting down of trees for sale and other activities as strategies for economic survival. All these contribute to the acceleration of environmental degradation.

2.8 Mining

Mining and other extractive industries are rapidly depleting energy and mineral resources (Gecaga 1999:30). Creating the pits or quarries requires the removal of virtually all natural vegetation; top soil and subsoil to reach the aggregate underneath. The study revealed that there are several quarries across Kericho County that are either
still in use or have been abandoned. The researcher noted that most of these quarries are mainly created when developing infrastructure such as roads. For example, in the construction of Kericho-Kisumu highway several pits and quarries have been created. The fig 2.9 shows the construction work taking place in Barsiele location of Londiani division.

Fig.2.9 Quarrying taking place at the Construction of Kericho-Kisumu highway across Londiani division.

Photo taken on 8.02.2013

The research findings revealed that not only does mining and quarrying lead to loss of existing wildlife, but also to biodiversity as plants and aquatic habitats are destroyed. Moreover, adjacent eco-systems are affected by noise, dust, pollution and contaminated water.
Pits and quarries disrupt the existing movement of surface and groundwater; they interrupt natural water recharge and can lead to reduced quantity and quality of drinking water for residents and wildlife near or downstream from a quarry site. As observed in the study, most of the old pits and quarries such as Kusumek quarry in Bureti division have not been properly rehabilitated,

Fig.2.10 An abandoned quarry at Kusumek, left by ISAAC Construction Company Limited, during the construction of Kericho-Sotik highway in 1994.

These pits and quarries require 100% rehabilitation. However, clearly this requirement is not being met due to poor supervision. Destroyed ecosystems and water aquifers are irreplaceable. Soi (O.I 9-02-2013) pointed out that mining had caused physical disturbances to the landscape, creating eyesores such as waste-rock piles and open pits.
He noted that disturbances of soil and land through mining affect the beauty of the landscape particularly in Bureti division.

Domestic animals and people often fall into these open quarries accidentally and die. The quarries are deep and hold a lot of water (Sophia O.I. 9-06-2013).

There are many other concerns. Beyond the physical changes to the landscape, the daily barrage of noise, dust and exhaust produced by hundreds of dump trucks hauling aggregate can have serious effects on the health of the people living nearby.

The foregoing chapter indicates that in Kericho County there is a significant degradation of natural resources such as soil, air, forests, and water. This is mainly attributed to economic and human activities. These economic activities have accelerated soil erosion, degradation of forest reserves and vegetation cover. Agricultural activities, illegal logging to meet timber and charcoal needs, overgrazing, mining, overcrowding and unequal distribution of land often forces them to overwork the soil, encroach and clear the nearby forests and pollute water resources.

The research findings revealed that not only does mining and quarrying lead to a loss of existing wildlife, but also huge loss of biodiversity as plants and aquatic habitats are destroyed. Moreover, adjacent eco-systems are affected by noise and dust that pollutes the air and contaminates the water.

The foregoing chapter leads us to the next chapter which focuses on the social teachings of the Catholic Church on environmental conservation. The chapter provides the basis of examining the social teachings of the Catholic Church on environmental conservation and management and relates it to Kericho County.
CHAPTER THREE

SOCIAL TEACHINGS OF THE CATHOLIC CHURCH ON ENVIRONMENTAL CONSERVATION

In this chapter, attempts have been made to unearth the social teachings of the Catholic Church on environmental conservation. A critical assessment on various themes makes it evident that indeed the Catholic Church has a lot to teach on environmental conservation and management. The social teaching of the Catholic Church offers a developing and distinctive perspective on environmental issues. Thus this chapter highlights the Catholic Church’s insights that provide guidance on how human beings can best relate with the environment.

3.1 A Sacramental Universe

The Catholic Church emphasizes a God-centered and sacramental view of the universe, which grounds human accountability for the fate of the earth. They are of the view that the whole universe is God's dwelling. The earth is a uniquely blessed corner of the universe and it is gifted with unique natural blessings. It is humanity's home, and humans are never so much at home as when God dwells with them. The “visible cosmos is itself both the creation and the manifestation of the word and spirit of God (Genesis 1:1-31), (Ruether 2000:612).

To reach the root of evils that confront humanity as well as to find a solution for them, Boff (1994:245) acknowledges that we need a new theological worldview. He insists on
a theological worldview that sees this planet as a great sacrament of God, the temple of the spirit, the place of creative responsibility for human beings. Human beings are called upon to protect the natural resources such as water, air, soil, and forests and ensure that these resources are not subjected to destruction. Scientific innovations must take into consideration the conservation of the environment.

United States Catholic Conference, (1991) notes that throughout history, people have continued to meet the Creator on mountain tops, in vast deserts, and alongside waterfalls and gently flowing springs. In storms and earthquakes, they found expressions of divine power. In the cycle of the seasons and the courses of the stars, they have discerned signs of God's fidelity and wisdom. Human beings still share in that sense of God's presence in nature (Christiansen and Grazer 1996:231).

Fr. Baraka (O.I.12-06-2013) stated that protecting and caring for the environment fulfills Christian duty of being co-creators with God. Furthermore, he observed that the Bible teaches human beings to give new life to the earth by providing food to animals and caring for the birds, fish and other sea creatures (Psalms 104:25,30).

In his 1990 message for the celebration of the World Day of Peace, Pope John Paul II called Christians to respect and protect the environment, so that through nature people can “contemplate the mystery of the greatness and love of God”. He further emphasized that human beings obey God’s command by protecting and caring for the whole of Creation, such as plants and animals, mountains and oceans. God brings them into being and sustains them in existence. It is to the Creator of the universe, then, that we are
accountable for what we do or fail to do to preserve and care for the earth and all its creatures. For the earth is the Lord's and its fullness; the world and those who dwell in it (Ongong’ a 1999: 60). Dwelling in the presence of God, we begin to experience ourselves as part of creation, as stewards within it, not separate from it. As faithful stewards, fullness of life comes from living responsibly within God's creation.

Stewardship implies that we must both care for creation according to standards that are not of our own making and at the same time be resourceful in finding ways to make the earth flourish. It is a difficult balance, requiring both a sense of limits and a spirit of experimentation. Even as we rejoice in earth's goodness and in the beauty of nature, stewardship places upon us the responsibility for the well-being of all God's creatures. The parishioners who responded to the questionnaires stated that during creation, human being was given responsibility of taking care of the environment. At least 65 percent of the informants argued that human beings were commanded by God to cultivate, guard and care for the environment.

The sacramental understanding of creation attributes a “sacral” quality and character to creation (Berry 1990:157). This stance implies that nature participates in a finite manner in the very being and holiness of God. Therefore, its sacramental quality should be a reason enough against all forms of destruction.

God penetrates all His creation with His presence. Therefore, we must not treat any of God’s creatures (plants or animals) reckless but deal with them in a sensitive manner, with empathy and reverence. Whoever commits a fault against a creature, commits a fault against God, the creator Himself.
Nash (1996:199) notes that St. Francis of Assisi (of Umbria Italy and Founder of the Franciscan Order) advocated for the protection of nature because everything is equal in its derivation from God and its capacity to glorify God. The Catholic Church in Kericho County has continued to uphold these teachings and values of environmental protection. Father Kipnaniwet (O.I 20.02.2013) observed that, in sermons during Catholic Environmental Day in Kericho County, the Christians are challenged to protect their environment by planting trees, protecting water catchment areas, forests and to showing care for other living creatures. Further, he noted that through such activities Christians honour and worship God through conserving the environment.

3.2. Respect for Life

In his 1990 message for the celebration of the World Day of Peace, Pope John Paul II maintained that respect for life, and above all for the dignity of the human person, is the ultimate guiding norm for any sound economic, industrial or scientific progress. The complexity of the ecological question is evident to all. It calls humanity to examine how they use and share the resources of the earth, what they pass on to future generations, and how they live in harmony with God's creation. He further noted that there were certain underlying principles, which while respecting the legitimate autonomy and the specific competence of those involved could direct research towards adequate and long-lasting solutions. These principles are essential to the building of a peaceful society. No peaceful society can afford to neglect either respect for life or the fact that there is integrity to creation (The Ecological Crisis: A Common Responsibility 1990 no. 7).
Respect for nature and human life are inextricably related. According to Pope John Paul II, respect for life, and above all for the dignity of the human person extends also to the rest of creation. Other species, ecosystems, and even distinctive landscapes give glory to God.

In their 1988 address to the Catholic community on ecology, the Catholic Bishops of Lombardy stated that “to respect the natural environment means to steward the potential which the creator has infused into it and out of which human interaction precedes”. The natural environment is an ordered whole and upon this order it is willed by God that humanity establish his civilization. Human beings are to use the natural resources, that is, water, air, soil, trees, mountains and land at their disposal in a sustainable way in order to improve their living standards. They further observe that it is essential that every type of activity and alteration of the environments becomes carefully evaluated. Evaluation on the basis of economic considerations and attention to the possible risks of destruction to the environment considered. Respect for the environment is gratitude toward God, and activities concerned with preserving the beauty of the natural environment are not far from being a form of praise and worship (Christiansen and Graze 1996:303).

The diversity of life manifests God's glory. Every creature shares a bit of the divine beauty. God speaks to humanity through the visible creation. The material cosmos is presented to human beings so that they can read traces of the Creator. Light and darkness, wind and fire, water and earth, the tree and its fruit speak of God and symbolize both God’s greatness and omnipresence.
Human beings must share the earth’s bounty equitably and respect the created order of the cosmos. Every creature depends upon the same environmental resource, that is, air, food, water, and basic resources (Gottlieb 1996, and Hessell 1996). These resources must be protected and conserved for the benefit of all creation. The divine goodness could not be represented by one creature alone. God produced many and diverse creatures, so that what was needed to one in representation of the divine goodness might be supplied by another. Hence, the whole universe together participates in the divine goodness more perfectly, and represents it better than any single creature. The wonderful variety of the natural world is, therefore, part of the divine plan and, as such, invites our respect. Accordingly, it is appropriate that we treat other creatures and the natural world not just as means to human fulfillment but also as God's creatures, possessing an independent value, worthy of our respect and care.

Many natural resources are non-renewable and therefore should not be subjected to indiscriminate exploitation. This criterion of moderation is demanded by the necessity of the common good of all humanity and particularly by concern for the development activities, which are economically poor. Ecological concern must be firmly and universally embraced. It must not be forgotten that the current generation is responsible for the possibility of development in the future and this potential would become compromised by the lack of those resources which today are improvidently consumed.

The Australian Bishops’ committee for Justice, Development and peace (1996:253) hold strongly that Christians have an ethical duty to respect the gifts of creation and to use them in accordance with the will of God. There is an order in the universe which
must be respected, and human beings endowed with the capability of choosing freely, have the responsibility to preserve this order for the well-being of future generations.

According to Father Baraka (O.I.12-06-2013) Christians in Kericho County are encouraged to be stewards, responsible and accountable for God’s entire creation. Further, he notes that in the book of Genesis, God instructed human beings to look after His creation; plants, animals, birds, water and sea creatures. Christians have the obligation to cultivate, guard and care for the environment as well as show value to other creatures.

Human beings exhibit respect for creation and reverence for the Creator by preserving natural environments, protecting endangered species and laboring to make human environments compatible with local ecology. And also by employing appropriate technology and carefully evaluating technological innovations as humanity adopt them,

3.3. The Planetary Common Good

According Christinsen (1996:185) the Catholic social teaching emphasize that the environment is an essential component of the common good. The common good requires the constant ability and effort from every individual, community or country to seek the good of the environment as though it were one's own good. An essential component of the common good would be the protection of the natural resources such as air, water, soil, forest resources and wildlife. These natural resources require that human beings use them in a suitable manner in order to avoid their destruction and
pollution. Safe disposal of products such as nuclear and toxic waste, which take collective action to secure, would be part of the common good.

Pope John Paul II, in his 1990 “World Day of Peace Message”, noted that the environmental crisis has reached such proportions as to be the responsibility of every individual and nation. He further emphasized that various aspects demonstrate the need for concerted efforts aimed at establishing the duties and obligations that belong to individuals, peoples, States and the international community. Development must not exclude respect for the natural resources, such as water, air, land and forest which constitutes the natural world. Governments have particular responsibilities to protect their own natural resources. Pope John Paul II insisted that the state has the task of providing for the defense and preservation of common good such as the natural and human environments ((Pope John Paul II EC, no.40).

The natural resources such as water, air, forest and land are part of the heritage of the entire human family. They are held in common across national boundaries and continental divides. They belong to both the poor, developing and developed nations. These natural resources require a collective protection and conservation by all nations.

It also calls for worldwide recognition of the common needs of each nation. These calls for proper use of all resources now and in the future as well as proper self-restraint in the use of natural resources (McHugh1996:326).

Pope John XXIII (1963) in his letter Peace on Earth emphasized the world's growing interdependence. The nations of the world as well as communities share very vital natural resources such as air and water. The continued pollution and destruction of these
important resources affects the entire universe. These emerging problems need to be addressed by extending the principle of the common good from the nation-state to the world community. Environmental concern, such as global warming, destruction of the ozone layer through the ‘green house effect’ has heightened the awareness of just how interdependent the world is. The universal common good can serve as a foundation for a global environmental solution. Everyone is affected and thus all are responsible. Ecological crisis is due to disregard for the hidden, yet perceivable requirements of the order and harmony which govern nature itself. Such order and harmony require that humans view themselves as part and parcel of creation. So, planetary ecology must be regarded as a key factor of the universal common good.

3.4. A New Ecological Solidarity

The duty of solidarity calls for a firm and persevering determination to commit oneself to environmental conservation. New Solidarity promotes cooperation and a just structure of sharing in the earth community for purposes of environmental conservation. It has its basis in the Christian meaning of friendship. Solidarity requires sacrifices of our own self-interest for the good of others and of the earth we share. It places special obligations upon the industrial democracies. States must increasingly share responsibility, in complimentary ways, for the promotion of a natural and social environment (McHugh1996:325).

There is an urgent moral need for a new solidarity in order to promote a healthy natural and social environment, especially in relation between the developing nations and those that are highly industrialized. Only with equitable and sustainable development can
poor nations curb continuing environmental degradation and avoid the destructive
effects of the kind of overdevelopment that has used natural resources irresponsibly
(Pope John Paul II 1990:219). No plan or organization will be able to effect the
necessary changes unless world leaders are truly convinced of the absolute need for this
new solidarity, which is demanded of them by the ecological crisis.

In a joint letter by the Guatemalan Bishops’ Conference on February 29, 1988, the
catholic bishops were of the view that the task of environmental protection can only be
carried out effectively if each individual does his or her part generously. They
emphasized that the first requirement is solidarity. Solidarity makes human beings to
seek solution to the problems of their neighbours as well as nature (Christiansen and
Grazer 1996:288). Ecological solidarity is our covenant with the land, the ocean, the
forests, the rivers and mountains. Without the hills, where else can we lift up our eyes to
ask for help (Psalms 121:1)? Without the trees of the field, who will clap their hands
when we go out in joy and are led back in peace (Isaiah 55:12)? (Kwok-Pui-

Father Karanja (O.I.17-04-2013) observed that commitment of believers in Kericho
County to a healthy environment for everyone stems directly from their belief in God
the Creator. He added that respect for life and for the dignity of the human person
extends also to the rest of creation, which is called to join humanity in praising God
(Psalms 148:96).

In the life of St. Francis of Assisi we have an example in Christianity of the affirmation
and embrace of nature. St Francis’ love and solidarity with nature is celebrated in
Christianity. In 1979, Pope John Paul II paid tribute to St. Francis' love for creation by declaring him the patron saint of ecologists. Pope John Paul II encouraged Catholics to follow the example of St. Francis by embracing all creatures as members of a single family and by offering respect, dignity, and care to each family member. St. Francis communicated with birds, animals and plants. St. Francis’ rapport with nature, his interest in and love for it, is often described in terms of its relationship to the religious life, aspects of the life of Jesus, or its utility for human beings. As a friend of the poor who was loved by God's creatures, St. Francis invited all of creation—animals, plants, natural forces to give honour and praise to God (Kinsley 1996:121).

The foregoing discussion confirms that the Catholic Church in Kericho County bears a unique responsibility under God, to safeguard the created world. Safeguarding creation requires Christians to live responsibly within it. The human family is charged with preserving the beauty, diversity, and integrity of nature, as well as with fostering its productivity.

3.5. **Universal Purpose of Created Things**

To possess the conditions for living with dignity is what Catholic Social teaching designates as “the common purpose of created things,” namely, that God intends the goods of earth, insofar as they may be used for the benefit of human beings, to ensure the flourishing of the entire human community. This is the classic meaning of the Psalmist’s declaration, “The earth is the Lord’s and all it holds” (Psalms 24:1) human beings are stewards of creation, in the interest not just of other creatures but the whole creation, human and non-human, and the test of stewardship is establishing conditions
of flourishing for the whole human community together with other species
(Christiansen 1996:186).

God has given the fruit of the earth to sustain the entire human family without
excluding or favoring anyone. Human work has enhanced the productive capacity of the
(1990) notes that there is an increase of importance in the production factor both of non-
material and of material wealth. Many people, in the south are still deprived of the
means of livelihood. A country may in many ways compromise its ability to meet the
essential needs of its people in the future by overexploiting resources. The direction of
technological developments may solve some immediate problems but lead to even
greater ones. Large sections of the population may be marginalized by ill-considered
development, and thus destroy the natural environment.

In moving toward an environmentally sustainable economy, we are obligated to work
for a just economic system which equitably shares the bounty of the earth and of human
enterprise with all peoples. Economic growth has to have set limits in terms of
population or resource use beyond which lies ecological disaster. Different limits should
hold for the use of energy, materials, water, forests and land (Christiansen and Grazer

Ecological justice acknowledges that human beings have a duty towards the earth. The
earth has dignity and it has rights. Having existed for millions of years before human
beings appeared, the earth has the right to continue to exist in well-being and
equilibrium. Ecological justice proposes a new attitude towards the earth, that of
benevolence and mutual belonging, while at the same time seeking to repair the injustices committed by the technical-scientific project (Boff 1994:241). Liberative solidarity model calls for the protection of the weaker and threatened individuals and units. Protection and conservation of the environment is part of this. It is committed not only to our relationship with one another, but also with nature and the universe. It also emphasizes the transformation of the disfigured and overexploited nature.

3.6. Option for the Poor

The Catholic Church holds the view that the ecological problem is intimately connected to justice for the poor. The goods of the earth, which in the divine plan should be a common patrimony often risk becoming the monopoly of a few who often spoil it and, sometimes, destroy it, thereby creating a loss for all humanity.

Christine (1996:172) rightly observes that the Catholic social teaching on the dignity of person advocates for the right of people to a decent livelihood in return for reasonable amounts of labour. It stresses on the duties of employers and capitalists to behave justly with regard to their privileged access to natural resources and the means of livelihood for workers. Also relevant to this task is the focus on Catholic teaching on protecting and empowering the most vulnerable and weak. There is growing evidence that environmental degradation afflicts the poor disproportionately.

Environmental problems in Kericho County can prevent people from reaching an acceptable standard of living. This is particularly true for poor people, who tend to rely more directly on their environment for survival. But all people, not just the poor, need
to work for environmental protection to ensure our long-term survival and wellbeing (Father Cheruiyot O.I. 19-06-2013).

Defending the vulnerable and defenseless should also include the weak and silent partner, the earth. Humanity can no longer see themselves as rulers of nature but think of themselves as gardeners, caretakers, mothers and fathers, trustees, lovers, priests, co-creators and friends of a world that gives life and sustenance. The earth also depends increasingly on human beings in order to continue both for itself and for humanity (McFague 1979:13). The poor of the earth offer a special test of our solidarity. The painful adjustments we have to undertake in our own economies for the sake of the environment must not diminish our sensitivity to the needs of the poor at home and abroad. The option for the poor embedded in the Gospel (Luke 4:16-21 and Matthew 25:40) and the Catholic Church's teaching makes us aware that the poor suffer most directly from environmental decline. Nature will truly enjoy its second spring only when humanity has compassion for its own weakest members.

The poor people of the world suffer twice as much due to environmental degradation. The research revealed that the poor people are increasingly clustered in remote and ecologically fragile areas. The researcher observed that in rural areas of Kericho County, the best land tends to be taken over by wealthy farmers, who can afford modern technology to cultivate large areas. The subjugation of the earth by the dominant forces is based on power relations. Poor people are pushed out of arable areas because the rich either buy or even grab their land. They are pressured to occupy and exploit more
fragile lands including hillsides, rainforests and arid areas where it is hard to grow crops. The result is increased poverty and wanton destruction of land.

The Catholic Church in Kericho County brings a distinct perspective to the discussion of environmental questions, by lifting up the moral dimensions of these issues and the needs of the most vulnerable. This unique contribution is rooted in Catholic teaching calling human beings to care for creation and for "the least of these" (Mt 25:40). Of particular concern to the Church is how environmental problems and its response to these challenges affect the poor and vulnerable people at home and around the world.

Building on the commitment made by the U.S. bishops in their 1991 statement *Renewing the Earth*, the Environmental Justice Program (EJP) of the United States Conference of Catholic Bishops (USCCB) was created in 1993 to educate and motivate Catholics to a deeper reverence and respect for God's creation, and to encourage Catholics to address environmental problems, particularly as they affect the poor and vulnerable people.

The goods of the earth are part of the heritage of the entire human family. They belong to the poor and developing nations as well as to the rich and successful (Mc Hugh 1996:321). A related and vital concern is the Church's constant commitment to the dignity and the rights of the poor. Environmental progress cannot come at the expense of the rights of the poor. Solutions must be found that do not force us to choose between a decent environment and a decent life for people. Clearly, the poor people cannot be asked to make sacrifices to improve the environment without concrete support from the broader community.
3.7. **Authentic Development**

From the point of view of Catholic Social Teaching, authentic development is also a requirement of the planetary common good. There are moral imperatives both to preserve the environment for future generations and to ensure that our contemporaries live with dignity.

Christiansen (1996:185) note that one aspect of contemporary Catholic Social Teaching on the Common Good is the notion of authentic development. Authentic development affirms the right of all persons to conditions of social living that permit their full development. It is a development that ensures the well-being of the human person by integrating social and economic development, and environmental conservation and protection. It is impossible to separate the well-being of the human person from that of the earth. Therefore, authentic development places importance on the protection of the earth and its resources. Authentic development contains built-in restraints and limits that help it readily cohere with ecological reading of the common good.

In his 1979 address at Yankee stadium, Pope John Paul II strongly urged Christians to be in the forefront in favouring ways of life that decisively break with the frenzy of consumerism. The developed world is therefore obligated to address wasteful and destructive use of resources as a matter of top priority. It calls for global partnership to conserve, protect and restore the health and integrity of the earth’s ecosystem.

Authentic development gives two important moral imperatives first, to preserve the environment for future human generations and non–human species, and, second, to ensure that all our brothers and sisters worldwide have access to a good quality of life,
and that their dignity is respected and fostered (Msafiri 2007: 105). Authentic development entails global participation both for the good of the planet and that of humanity. Authentic development could be considered a component of the universal common good. Authentic development strongly recognizes that all people are equal and should be treated as such in their access to natural resources for development.

Authentic development should be people-centered, that is, one which brings a good quality of life to the dignity of everyone. Indeed, everyone is called to a lifestyle of sufficiency and not rampant consumption (Keena 2000:100). This means that humans should now learn to conserve and fight against negative attitudes towards the environment. Humanity should recognize the truth that caring for the environment is essentially a moral and spiritual problem as much as it is an economic and political one.

United States Catholic Conference, November 14, 1991 emphasized that authentic development supports moderation and even austerity in the use of material resources, for example, alternative sources of fuel other than fossil fuels. Authentic development also requires affluent nations to seek ways to reduce and restructure their over consumption of natural resources. It entails encouraging the proper use of both agricultural and industrial technologies, so that development does not merely mean technological advancement for its own sake but rather that technology benefits people and enhances the land (Christiansen and Grazer 1996).

Over-consumption has far reaching negative ecological implications and consequences. As David Hallman (2000) and Christiansen & Grazer (1996) aptly put it that the principle of sufficiency bridges the growing gap between extreme affluence and abject
poverty. Sufficiency from the view point of consumption ensures that every human being has access to enough resources for a good quality of life. Sufficiency is therefore a leveler among peoples. Those who are too poor to attain health, adequate nutrition, good housing and education would get resources they need and cause less unintended environmental destruction in their struggle for survival. The principle of sufficiency rooted in, the biblical tradition and adapted by the Catholic Social teaching to modern economic conditions, is eminently consistent with the restraints in consumption demanded by ecological responsibility. This principle instills the virtue of moderation in lifestyle, avoidance of excessive consumption and suspicion of growth for its sake. At the same time, it must be acknowledged that rapid population growth presents special problems and challenges that must be addressed in order to avoid damage done to the environment and to social development. In the words of Pope Paul VI, “It is not to be denied that accelerated demographic increase too frequently add difficulties to plans for development because the population is increased more rapidly than available resources” (*Encyclical on the Development of Peoples, March 26, 1967* no. 37). In *Encyclical on the Social Concern of the Church*, no. 25, Pope John Paul II has likewise noted that humanity cannot deny the existence, of a demographic problem which creates difficulties for development. He makes connections between population size, development, and the environment. There is a realization of the limits of available resources and of the need to respect the integrity and the cycles of nature and to take them into account when planning for development. Even though it is possible to feed a growing population, the ecological costs of doing so ought to be taken into account.
Human beings are charged with restoring the integrity of all creation. Humanity must care for all God's creatures, especially the most vulnerable.

The foregoing chapter has discussed the social teachings of the Catholic Church for the purpose of conserving the environment. These teachings underscore the need to conserve water, soil, forests, wild animals and land in Kericho County. These teachings include: a God-centered and sacramental view of the universe which grounds human accountability for the fate of the earth; a consistent respect for human life that extends to respect for all creation including natural resources such as water, air, forests, mountains, soil, land and animals; a worldview affirming the ethical significance of the common good.

Further the Catholic Social Teachings offer an ethics of solidarity promoting cooperation and a just structure of sharing in the world community. It also provides for an understanding of the universal purpose of created things which requires equitable use of the earth's resources such as water, forests, air and land; an option for the poor, which gives passion to the quest for an equitable and sustainable world; a conception of authentic development, which offers a direction for progress that respects human dignity and the limits of material growth.

The analysis of the catholic social teachings on environmental conservation shows that the Church attaches great concern and value on protection of the earth’s natural resources such as water, forests, wildlife, soil, land and air. The next chapter examines the practical steps the Catholic Church has taken in environmental conservation.
CHAPTER FOUR
THE ROLE OF THE CATHOLIC CHURCH IN ENVIRONMENTAL CONSERVATION IN KERICHO COUNTY

The Church has an integral contribution to make towards environmental conservation and management. It assists in providing direction; in forming new values that stress individual and joint responsibility towards the environment. This chapter is an in depth exploration of the role of the Catholic Church in environmental conservation in Kericho County. It focuses on how the Catholic Church has been creating awareness on environmental issues.

4.1. THE CATHOLIC CHURCH AND ENVIRONMENTAL AWARENESS

Christians are co-creators and co-workers with God and therefore should protect the environment. Human beings have been given the responsibility by God to guard, protect and to take care of creation (Genesis 2:15). Christians are to adhere to this responsibility through procreation, planting of trees, protecting water catchment areas and conserving the wildlife. Christians believe that the whole creation belongs to God (Psalm 24:1). God delights in the creation and desire its wholeness and well-being. Christian’s responsibility as stewards is one of the most basic relationships they have with God. It implies a great degree of caring for God’s creation as stewards.
Fig. 4.1 The pie chart shows the level of awareness of the Christian teachings about caring of the environment.

The pie chart above shows that 87% of the respondents were aware of the biblical and Christian teachings about caring and protecting the environment, while 13% of the respondents were not aware of the Christian teachings on environment.

Fig. 4.2 The graph below shows an analysis of the Christian teachings on protection of the environment.
From the above graph (See figure 4.2), the study confirmed the following: 25% of the respondents mentioned that the environment is God’s creation, 18% affirmed that human beings are co-creators and 42% indicated that human beings are stewards and guardians of the environment.

Father Baraka (O.I. 12-06-2013) noted that it is the responsibility of Christians to guard and care for the environment. God put human beings in the Garden of Eden and instructed them to work on it and take care of it (Genesis 2:15). Thus human beings are stewards responsible and accountable for God’s entire creation. Fr. Baraka further pointed out that by protecting the environment Christians obeys God’s command.

Philip (O.I 18-06-2013) pointed out that there is interdependence between water, soil, air and sea creatures to humanity’s survival. The destruction of these vital natural resources, definitely leads to the destruction of humanity’s life on earth.

The Catechism of the Catholic Church articulates and reaffirms the centrality and unique relevance of the great commandment of love for Christian living. This great love extends to the environment and the entire creation. It explicates biblical passages from the Old and New covenants. Further, it highlights the link between scripture and the Catholic tradition and theological reflections of the church fathers such as St Augustine of Hippo (Chapman 2000). According to St. Augustine of Hippo, the beauty of the earth, sea, skies and movement of air is a confession of who made them if not the beautiful one who is not subject to change.
St. Francis of Assisi, a great and respected catholic monk, treated all things with great respect and tenderness. He told his associates not to cut the trees down completely, so that they could grow again, and not to take all the bees ‘honey, lest they starve. In his writings, prayers, and songs, we feel the lively enthusiasm the universe induced in his experience of the world and of God. Saint Francis invited all of creation-animals, plants, natural forces even brother sun and sister moon-to give honour and praise to the Lord (Boff 1985:53).

In his 1990 message for the celebration of the World Day of Peace, Pope John Paul II emphasized that the Catholic Church has a serious obligation to care for all of creation (Christiansen and Grazer 1996:222). The commitment of believers to a healthy environment for everyone stems directly from their belief in God the creator (McHugh 1996:323). Respect for life and for the dignity of the human person extends also to the rest of creation, which is called to join humanity in praising God (Psalms148:96). The Holy Father called on the modern society to take a serious look at it’s lifestyle-particularly the demand for instant gratification and unlimited consumption. He also called for education in ecological responsibility; responsibility of oneself, for others, and for the earth.
The research findings showed that the Catholic Church in Kericho County is involved in training and teaching Christians on environmental issues. At least 92 percent of the parishioners concurred that the Catholic Church educated people on environmental conservation while 8 percent were not aware of any initiative by the Catholic Church aimed at creating awareness on environmental conservation. The Catholic Church has duty to inculcate new lifestyles and economic paradigms which will renew and promote life not only spiritually, but also physically and existentially.

According to Father Kipnaniwet (O.I 20.02.2013), the parish offers periodic sermons on environmental conservation. Furthermore, he noted that during Lenten Campaign Programmes that ran annually, they often incorporate the teachings on environmental conservation. Lent is a time of reflection and prayer. The Annual Lenten Campaigns broad objective is to sensitize Christians on issues that affect society and how they relate to the social teachings of the church. Father Kipnaniwet further notes that during this period, the parishioners are equipped with knowledge on how to keep the
environment clean during the World and Catholic Environmental Days (See Appendix 2). However Father Kipnaniwi point out that, most of these programmes are carried out only once in a year and hence the need for other avenues to be initiated in order to create awareness on environmental conservation. In addition some educational programmes, the catholic social teachings are not sufficiently integral and explicit. As a result, most catholic faithful are not familiar with the basic content of catholic social teaching. This has resulted in lack of sufficient awareness, advocacy and commitment to responsible stewardship of the environment in Kericho County.

Father Karanja (O.I.17-04-2013) notes that the Catholic Church occasionally invites environmental experts, for example agricultural extension officers and NEMA officers in Kericho to train the congregation on how to manage and conserve their environment. These officers educate Christians on government policies regarding the protection of the environment. The Catholic Church advocates for implementation of government policy that aims at ensuring the proper conservation of the soil, water and forests. Father Karanja also noted that environmental experts in Kericho County are few and therefore often do not have adequate trained personnel to carry out various environmental programmes. He further pointed out that it is difficult to train every parishioner on environmental conservation. This has led to lack of coordination of environmental care and protection initiatives in the Catholic Church.

The research revealed that there were published materials on environmental conservation in the Catholic Diocese bookshop in Kericho (Appendix 2). The Catholic Church usually publishes literature on environmental conservation: books, magazines
and environmental journals, for example, *Environmental Conservation: A Call to Holiness* in “The Tindnyo Vision” vol. 3 April 2010 (Fr. Karanja O.I.17-04-2013). These materials are made available to the parishioners at subsidized prizes. The diocese of Kericho has three major Ecclesial Associations: Catholic Women Association, Catholic Men Association and Youth. This denotes that the Catholic Church has notable potential, especially viable systems, for ecological formation and security. These groups are engaged in disseminating environmental information and awareness.

Fig. 4.4 The graph below shows an analysis of how the Catholic Church creates awareness on conservation of the environment.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Offering Sermons</th>
<th>Seminars</th>
<th>Publishing Literature</th>
<th>Education on Policies</th>
<th>Championing Waste Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Respondents</td>
<td>62</td>
<td>67</td>
<td>37</td>
<td>60</td>
<td>48</td>
</tr>
</tbody>
</table>
Fig. 4.4 shows the results of the relationship between Catholic environmental programmes and the respondents in Kericho County. From the table and the graph, the study confirmed that an overwhelming majority of the respondents put more emphasis on seminars and workshops as an effective way of conserving the environment. Over 67% of the respondents felt that seminars and workshops can assist in providing direction; in forming new values that stress individual and joint responsibility towards the environment. Moreover, 62% of respondents observed that they were able to acquire knowledge on how to effectively conserve the environment through regular sermons from the Catholic clergy. It is evident from the results that other programmes employed by the Catholic Church towards environmental conservation include publishing of literature 37%, education on environmental and government policies 60% and championing of waste collection during environmental days 48%.

Father Baraka (O.I.12-06-2013) argues that one of the activities that had a positive impact is sensitization of people on hygiene and sanitation through Participatory Hygiene and Sanitation Training (PHAST). The PHAST programme is aimed at equipping the parishioners with knowledge on living in a healthy environment and thereafter encouraged to replicate this in their home environment. He further observes that the number of people who have put up sanitation facilities, such as toilets has increased. Hence PHAST training has helped reduce incidences of communicable disease. However, Father Baraka noted that the implementation of Participatory Hygiene and Sanitation Training (PHAST) has had its own challenges. For instance, he points out that they have had to cope with a shortage of environmental health officers to educate
the parishioners on environmental health. In addition, most of the parishioners have not constructed waste disposal pits in their homes. They thus dispose biodegradable and non-biodegradable waste next to their homes which is an environmental hazard (Father Baraka O.I. 12-06-2013). The above discussion shows that despite the challenges experienced by the Catholic Church, the Christian communities can effectively contribute to environmental conservation.

The Catholic Church also encourages the composition of songs on environment. These songs incorporate nature in worship. As the parishioners sing these songs, it creates awareness on the importance of protecting and preserving the environment. In turn, such an experience forms the ethical imperative of worship and preservation of creation (Irwin 1996:125). Below is an example of the praise and thanksgiving song on nature.

SONG OF PRAISE AND THANKSGIVING

Come to Him with songs of praise,
Songs of praise, rejoice in Him.

For the Lord is a mighty God,
He is king of all the world.

In his hands are valleys deep,
in His hands are mountain peaks.

In his hands are all the seas,
and the lands which He has made.

(Bragotti 2011:402)

The research findings indicated that the Catholic Church in Kericho County is involved in educating the parishioners on the importance of trees. Over 80 percent of the parishioners who responded to the question, on the Christian teachings about caring and protecting the environment agreed that they were being encouraged by the parish priest.
to plant trees in their church and home compounds while 20 percent were not aware of any tree planting initiatives. The catholic parish priests have established tree gardens in their respective church compounds as is the case at Chebangang parish. However, inspite of these tree planting initiatives, very few parishioners replicate this in their homes. This may be attributed either to the small farms owned by the parishioners which they use for subsistence farming or lack of funds to start these environmental projects in their farms.

Fig.4.5. This photograph shows trees that have been planted by the parishioners in the compound of Chebangang Parish in the diocese of Kericho.
The foregoing discussions underscores that the Catholic Church in Kericho County has continued to sensitize and educate its faithful on their urgent role of stewardship in environmental care and protection through proper management of resources on a sustainable basis. The Catholic Church has done this through incorporating education on environmental care and protection in their sermons, holding workshops and availing published literature on environmental issues.

In these workshops and seminars environmental experts, for example agricultural extension officers and NEMA officers in Kericho are invited. These officers equip the parishioners with knowledge on how to protect water resources, soil, forests and vegetative cover. Furthermore, during Lenten Campaign Programmes that ran annually, they often incorporate the teachings on environmental conservation. The Catholic Church usually publishes literature on environmental conservation, for example magazines such as “The Tindnyo Vision” vol. 3 April 2010.

The research findings showed that the Catholic Church in Kericho County was involved in training and teaching its members on environmental issues. The research revealed that the Catholic Church campaign on environmental conservation in Kericho County is undertaken by the Catholic Development and Agriculture Office together with the clergy.
4.2. THE CATHOLIC CHURCH AND ENVIRONMENTAL CONSERVATION

The Bible puts considerable restrictions on human dominion over nature; it teaches restraint on the resources of the earth. The biblical teachings provide a strong foundation for the conservation of the environment. It stipulates how trees, land, rivers and animals should be protected and managed (Kinsley 1996:118). The biblical teachings on environmental conservation restrict human beings from cutting down of fruit trees and that the land should lie fallow every seventh year (Lev.25:1-7).

The threat to the environment presents the Church with a call for prompt and vigorous response. Christians as faithful stewards bear the responsibility to affirm and support programmes, legislation, research and organizations that protect and restore the earth. This responsibility for a habitable environment is not just for human life, but for all living things (Mische 2000:597).

Fig. 4.6 The graph below shows how the parishioners engaged in soil, water and forest conservation in Kericho County.
As indicated in fig. 4.4 above, 82% of the parishioners stated that they engage in tree planting. The parishioners practice agro forestry, where they plant trees alongside other cover crops in their farms. The research also revealed that 58% of the parishioners agreed that the Catholic Diocese of Kericho is involved in the protection of water catchment areas, as is the case of Chebulu forest. Chebulu forest is a source of a spring which supplies water to the people of Kaplelartet sub-location. Other respondents mentioned construction of good drainage systems 45% and proper ways of cultivation 72% as ways of engaging in soil, water and forest conservation.

The research revealed that campaigns on environmental conservation in Kericho County are undertaken by the Catholic development and agriculture office and the clergy. Father Karanja (O.I.17-04-2013) however pointed out that there were inadequate financial resources to hold enough engagement forums aimed at up-scaling awareness programmes and increase the number of environmental projects across the county. He further noted that due to financial constraints experienced by the Catholic Church, only specific areas which are deemed to have high level of environmental degradation, such as Kaplelartet. This area had been selected for the establishment of environmental conservation project, such as protection of Chebulu forest. Hence other areas which are left out continue to experience environmental degradation.
The Catholic Diocese of Kericho initiated Chebulu-Kaplel water project in order to supply clean water to the people leaving around Chebulu forest. The Catholic Church has conserved and managed to build two springs: Tangurwet and Tabbet springs. It is managed by the Catholic Men Association. The clean water is pumped to a tank where it is treated and supplied to the people. Thus the Catholic Church has contributed to the conservation of water catchment areas of Chebulu forest and enabled the people living around this forest to access clean and safe drinking water.
Fig. 4.8 Water project built by the Catholic diocese of Kericho in October 2013 at Tangurwet spring in Chebulu forest.

Fig. 4.9 The photograph shows a water tank bought by the Catholic diocese of Kericho. Water from Tangurwet and Tabbet Springs is pumped into the tank and treated before being supplied to individuals.
Farmers are encouraged by the parish priests and the Catholic Development Office to practice agro-forestry. The researcher noted the Catholic Church had demonstration plots at Kaplelartet where farmers are trained during field days. Chemiromben demonstration plot is a half an acre farm. The farm is usually used for demonstrations during field days. This was a project initiated by the Catholic Diocese of Kericho to train farmers on proper cultivation methods. The farm has over twenty varieties of crops. The Chemiromben demonstration plot is managed by the Catholic Women Association; a group of over one hundred and sixty women. This group is supported by the Catholic Development and Agriculture officers.

Fig.4.10 The photograph shows Chemiromben demonstration plot at Kaplelartet which was established by the Catholic Diocese of Kericho.
Fig. 4.11 Mr Philiph Koskey and the researcher at Chemiromben demonstration Plot used during Field Days. Indigenous vegetables and tree seedlings have been planted in this farm.

Fig. 4.12 Chemiromben demonstration plot at Kaplelartet, tree seedlings and indigenous vegetables for a variety of crops have been planted by the Catholic Diocese of Kericho.
The Catholic Development and Agriculture officer, Cheruiyot Agnes (O.I. 23-03-2013) noted that her staff trains farmers on proper methods of farming in order to boost their harvest as well as conserve the soil fertility. She stated that they encourage farmers to embrace suitable farming methods such as the use of organic manure in their farms in order to enhance fertility and the texture of the soil. The knowledge and skills gained from this training has had a positive impact. Cheruiyot noted that poor public attitude towards the environment has led to irresponsible actions, negligence, and lack of compliance to environmental standards. These have destroyed the environment. The problem has its key manifestations in that communities and administrative agencies pursue different objectives and thus implement isolated environmental management strategies. Also, despite sensitizing farmers on proper methods of farming, they have continued to use chemical fertilizers thus depleting the soil (A.Cheruiyot O.I. 23-03-2013).

The researcher observed that the Catholic Church in Kericho has developed sustainable land and water management projects challenging adults, and youth to cherish environmental care and protection.

The research findings further revealed that the residents of Kericho county are encouraged to use energy saving *jikos* and biogas fuel which has greatly reduced the amount of firewood that is utilised. This is carried out by the government officials together with the Catholic Development and Agriculture office (A.Cheruiyot O.I. 23-03-2013). The energy saving *jikos* project is undertaken by the Catholic Women association. The women, with the support from the Catholic Development office, makes
energy saving *jikos* and sells it to the residents. However, the production cost of these energy saving *jikos* is very high hence making it expensive. This has made it difficult to sufficiently supply the residents of Kericho County with these *jikos*. Thus most of the residents can not afford and therefore they have continued to use large amount of firewood for cooking in their homes (A.Cheruiyot O.I. 23-03-2013).

Fig.4.13 Some members of the Catholic Women Association, led by Eunice Cheruiyot, 2nd right, standing beside the energy saving *jikos* which they have made.
Fig. 4.14 A kiln constructed by the Catholic Diocese of Kericho. The kiln is used in making energy saving *jikos* and managed by the Catholic Women Association at Kaplelartet.

The researcher also noted that the Catholic Development and Agriculture Office promotes the rearing of a small number of livestock. However, the Kipsigis community who are a majority in Kericho County place great value on cattle. They still view cattle as a status symbol and an important source of wealth and security, regardless of the quality of the animals. This traditional value has encouraged overstocking and this has led to overgrazing and thus environmental degradation. This has compelled the Catholic Development and Agriculture Office to promote and encourage farmers to establish zero grazing units. This is crucial because the farm sizes are small thus making it difficult to keep a large number livestock (A.Cheruiyot O.I. 23-03-2013).
Fig. 4.15 The pie chart shows the level of awareness of the parishioners on the existing programmes within the Catholic Church aimed at conserving the environment in Kericho County.

As shown in the pie chart above, 80% of the respondents indicated that they were aware of the programmes within the Catholic Church which aimed at conserving the environment in Kericho County, while 20% mentioned that they were not aware of such programmes.

Fig. 4.16 The graph shows existing programmes within the Catholic Church which aims at conserving the environment in Kericho County.
The researcher observed that environmental care and sustainability programmes are given priority in pastoral projects implemented by the Catholic Church in its parishes. As indicated in the graph above, at least 75% of the informants pointed out that the Catholic Church in Kericho County has mobilized the local Catholic community to join in the efforts of environmental conservation through seminars and workshops. Further, 42% of the informants observed that they have participated in World and Catholic Environmental Days celebrated on 1\textsuperscript{st} May and 14\textsuperscript{th} to 19\textsuperscript{th} September respectively. Other respondents mentioned that the Catholic Church has initiated youth environmental projects 63%, and field agricultural days 37%. The Catholic Church champions for proper disposal of waste, for example garbage and farm chemicals to avoid polluting the soil and water. It does this through its major Ecclesial Associations: Catholic Women Association, Catholic Men Association, the Youth Association and the Young Christian Students.

The research findings revealed that in each parish and in some of the Catholic institutions, such as schools, tree nurseries have been established. These nurseries are managed by the adult and youth groups. Tree seedlings are sold to support the projects financially (Father Cheruiyot O.I 13-06-2013). At times these tree seedlings are distributed to institutions ran by the Catholic Church in Kericho Diocese. The Church is also involved in planting indigenous trees in endangered water catchment areas. The figure 4.17 shows a parish priest, parishioners and students planting trees during the Catholic Environmental Day.
Fig.4.17 Father Cheruiyot and Young Christian Students planting trees during Catholic Environmental Day at Kipkelion Parish on 15th September 2012.

Fig.4.18 The Catholic clergy, patrons and Young Christian Students plants trees during Catholic Environmental Day at St. Monica Girls Secondary School’s field.
The foregoing discussion indicate that the Catholic Church in Kericho County is actively involved in restoring the purity of air, and water, halting the loss of farmland and sustaining ecological diversity in plant and animal life. Incontestably, Christians have exhibited respect for nature.

The foregoing chapter has discussed how the Catholic Church enhances environmental conservation and management in Kericho County. Research findings also show that the Catholic Development and Agriculture officers train farmers on soil conservation. They encourage farmers to embrace suitable farming methods such as the use of organic or compost manure in their farms in order to enhance soil fertility and texture. They are
also encouraged to practice agro forestry and to build gabions and construct terraces on their sloppy farms.

The Catholic Church advocates for the protection of the already existing forest reserves, for example the Mau and Londiani Forests. They have also developed tree nurseries. These tree seedlings are either sold to the parishioners at subsidized prices or distributed freely to people to plant in their farms.

The Catholic Church in Kericho County has initiated and mobilized the local Catholic communities to join in environmental clean-ups. The Catholic Church also encourages individuals to construct waste disposal pits to enhance proper disposal of waste. Thus the Catholic Church in Kericho County is involved in fostering the conservation and protection of natural resources such as air, water, forests, and land.

The Catholic Church has made extensive contribution in environmental conservation in Kericho County but it also face difficulties. First of all, they often do not have adequate trained personnel to carry out various programmes. This has led to a lack of coordination of environmental care and protection initiative in the Catholic Church (See Appendix 2).

In its overall assessment, the research revealed that there is much good will and many innovative efforts by the Catholic Church to communicate the social teachings of the church. At the same time, however, it is clear that the catholic social teachings are not integral and explicit in environmental forums and seminars organized by the Catholic
Church. As a result, far too many catholic faithful are not familiar with the basic content of catholic social teaching. More fundamentally, many of them do not understand the social teachings of the church as an essential part of the catholic faith.

Another difficulty faced by the Catholic Church is the lack of sufficient awareness, advocacy and commitment to responsible stewardship of the environment in Kericho County. The communities do not see the value of natural resources and this has led to the degradation of the valuable environment. This poor public attitude towards the environment has led to irresponsible actions, negligence, and lack of compliance to environmental standards leading to degradation.

Finally, the Catholic Church has inadequate financial resources to hold engagements forums aimed at up-scaling environmental awareness programmes and increase the number of stakeholders sensitized in Kericho County.
CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Having examined critically the causes of environmental degradation in Kericho County, the social teachings of the Catholic Church on environmental conservation and how the Catholic Church enhances environmental conservation and management in Kericho County, this chapter gives the summary of the findings, conclusion and makes appropriate recommendations guided by the research findings.

5.1 SUMMARY OF THE FINDINGS

The study analyzed the main factors which cause soil, water, forests and land resources degradation. It has emerged from the study that there is significant degradation of natural resources such as soil, air, forests, and water in Kericho County. This is mainly attributed to economic and human activities. These economic activities have accelerated soil erosion, destruction of forest reserves and vegetation cover, water pollution and degradation of land. Agricultural activities, overgrazing, mining, overcrowding and unequal distribution of land, has forced people to overwork the soil. In addition, illegal logging to meet timber and charcoal needs, has made people to encroach and clear the nearby forests and pollute water resources.

It is noted that the causes of soil degradation include destructive farming methods such as massive use of chemical fertilizers on crops such as maize and tea, among others. Prolonged poor agricultural practices have also contributed to declining soil fertility
especially on the mountainous and highland regions of Kericho County, such as, Londiani and Ainamoi divisions. The need to produce adequate food for an ever rapidly increasing population in the county has resulted in the cultivation of land more intensively. This has led to the cultivation of water catchment areas such as forest reserves and preserved swamps, like Chelilis in Bureti division.

The massive soil erosion and degradation that occurs in the three divisions, Ainamoi, Bureti and Londiani is caused by wind and water activity. During seasons of heavy rains water runoff carries the topsoil. The wind blows off the rich top soils particularly during the dry seasons. Subsequently the top soil has been left bare and loose due to overgrazing and destruction of the vegetative cover.

Deforestation is mainly attributed to illegal logging to meet timber and charcoal needs. The research revealed that saw-milling is practiced in Soget Location in Londiani division. The saw-millers do not observe the guidelines on logging which stipulates that mature trees are the only ones which should be harvested.

People generally share rivers with domestic and wild animals. This is the case with Chemosit river in Bureti division. It is also noted that dirty water from homes and sewage systems is channeled or directed into water sources, for example in Nyakacho, Ainamoi division.

Overgrazing witnessed across the three divisions has resulted in the depletion of the natural vegetation. It has rendered most top soils bare and sandy, thus making the survival of plants impossible. This is attributed to the value placed on cattle by the
Kipsigis community that lives in these areas. They still view cattle as a status symbol and an important source of wealth and security, regardless of the quality of the animals. From the research findings, it is noted that improper disposal of garbage is common in Kericho town; Ainamoi division. This includes household and industrial waste. Heaps of plastic papers and materials are found in open places, between houses and in the market places. This is because plastic bags are considered convenient, cheap and water proof. Unfortunately there is lack of recycling facilities for inorganic materials like plastics which pollute the environment.

Poverty, overcrowding and unequal distribution of land was noted across the three divisions, Ainamoi, Bureti, and Londiani. The poor inhabit or cultivate ecologically fragile landscape such as forests, wetlands, lakeshores and hillsides, such as Londiani forest, and the hillsides of Kipkelion. This has led to degradation of these natural resources.

The research findings revealed that not only do mining and quarrying lead to loss of existing wildlife, but also to a huge loss of biodiversity because plants and aquatic habitats are destroyed. Moreover, adjacent eco-systems are affected by noise and dust which pollutes the air and contaminates the water. Mining has caused physical disturbances to the landscape and creates eyesores such as waste-rock piles and open pits. Disturbances of soil and land through mining affect the beauty of the landscape particularly in Bureti division. In addition, domestic animals and people often fall into these open quarries accidentally and die.
The Social teachings of the Catholic Church on environmental conservation and management express integral dimensions of ecological responsibility: First is a God-centered sacramental view of the universe, which underpins human accountability for the fate of the earth. Stewardship places upon the Catholic Church the responsibility for the well-being of all God's creatures. The Catholic Church reminds the parishioners that they are co-creators with God. The church encourages the parishioners to conserve and protect the whole of creation including the hills, rivers, forests, wet lands and soil in their lands.

Secondly, the Catholic Church emphasizes on a consistent respect for human life which extends to all creation. It holds the view that natural resources must be properly utilized and protected. Through the Catholic Development and Agriculture office and the clergy, the Catholic Church encourages the parishioners to use the natural resources, that is, water, air, soil, trees, mountains and land at their disposal sustainably. The Catholic Church insists that the parishioners have the obligation to cultivate, guard and care for the environment as well as show value to other creatures.

A world view affirming the ethical significance of global interdependence and the common good is the third social teaching of the Catholic Church. The earth resources are commonly shared by plants, animals and human beings. These resources are held in common across national boundaries and continental divides. An essential component of the common good would be the protection of the natural resources such as air, water, soil, forest resources and wildlife. The Catholic Church encourages the parishioners to
use these natural resources in a suitable manner in order to avoid its destruction and pollution. It also champions for safe disposal of waste from homes and industries.

The Catholic Church also emphasizes an ethics of solidarity, promoting cooperation and a just structure of sharing in the world community. Solidarity requires commitment and sacrifices of our own self-interest for the good of others and of the earth we share. It is committed not only to the people’s’ relationship with one another, but also with nature and the universe. The Catholic Church insists on the transformation of the disfigured and overexploited nature. It calls for liberation of the environment from destruction. It does this through encouraging its faithful to practice agro-forestry and reforestation.

An option for the poor that gives passion to the quest for an equitable and sustainable world is the fifth social teaching of the Catholic Church. The church is of the view that defending the vulnerable and defenseless should also include the weak and silent partner, the earth’s natural resources. The poor earth must be liberated from any form of destruction. The Catholic Church insists that people should not see themselves as rulers of nature but as gardeners, caretakers, co-creators and friends of a world that gives life and sustenance.

Finally, the Catholic Church emphasizes the social teaching on a conception for authentic development which offers a direction for progress that respects human dignity and limits to material growth. The Catholic Church calls upon the parishioners to address wasteful and destructive use of resources as a matter of top priority. It encourages proper use of both agricultural and industrial technology in order to enhance
conservation of environment. To this effect the Catholic Church has introduced the use of energy saving *jikos* in order to reduce the consumption of wood fuel.

The analysis of the Catholic Social Teachings on environmental conservation and management shows that the Church attaches great concern and value to the protection of the earth’s natural resources, such as water, forests, wildlife, soil, land and air. Through these social teachings, the Church in Kericho County propagates environmental conservation. It encourages its faithful to protect their environment by planting trees, using energy saving *jikos*, practicing proper methods of farming, establishing zero grazing units and disposing waste properly.

An evaluation of the role of the Catholic Church in enhancing environmental conservation and management in Kericho County indicates that the Catholic Development and Agriculture Office occasionally holds workshops on environmental conservation. During these workshops and seminars environmental experts, for example agricultural extension officers and NEMA officers are invited. These officers equip the parishioners with knowledge on how to protect water resources, soil, forests and vegetative cover. The Catholic Development and Agriculture Office also incorporate ecclesial associations such as the Catholic Women Association, Catholic Men Association and Youth in its projects and programmes of environmental conservation. During the annual Lenten Campaign Programmes that ran annually, the church incorporates the social teachings on environmental conservation. The Catholic Church usually publishes and distributes literature on environmental conservation: books,
magazines and environmental journals, for example, *Environmental Conservation: A Call to Holiness* in “The Tindnyo Vision” vol. 3 April 2010.

The research findings also show that the Catholic Development and Agriculture officers train farmers on soil conservation. They educate farmers on suitable farming methods such as the use of organic or compost manure in their farms in order to enhance fertility and the texture of the soil. Farmers are also encouraged to embrace other methods of farming such as contour farming, planting of cover crops and construction of terraces on their sloppy farms so as to control soil erosion. In addition, the Catholic Development and Agriculture Office promotes the keeping of few livestock in order to control land degradation.

The Church encourages the protection of the already existing forests reserves, such as the Mau and Londiani. In each parish and in some of the Catholic schools, tree nurseries have been established. The tree seedlings are either sold to the parishioners at subsidized prices or distributed freely to people for planting in their farms. The parishioners also practice agro-forestry.

The Catholic Church has been mobilizing the local communities to engage in cleaning the environment. It also advocates for proper disposal of waste in order to avoid polluting the soil and water. The Church trains its faithful on hygienic practice, such as Participatory Hygiene and Sanitation trainings. The research findings demonstrate that the Catholic Church in Kericho County to some extent is involved in fostering the conservation and protection of natural resources.
Although the Catholic Church has contributed to environmental conservation in Kericho County, it faces some challenges. First, the church often does not have adequate trained personnel to carry out various programmes. This has led to a lack of proper coordination of environmental care and protection initiatives. Secondly, it also has inadequate financial resources to hold enough engagements forums aimed at up-scaling environmental awareness programmes and increase the number of stakeholders sensitized in Kericho County. The third challenge facing the Catholic Church is that, most catholic faithful are not familiar with the basic content of catholic social teaching. This has resulted in lack of sufficient awareness, advocacy and commitment to responsible stewardship of the environment in Kericho County.

Fourthly, inspite of the tree planting initiatives by the Catholic Church, very few parishioners replicate this in their homes. This may be attributed either to the small farms owned by the parishioners which they use for subsistence farming or lack of funds to start these environmental projects in their farms. The final challenge being experienced by the Catholic Church is the poor public attitude towards the environment. This has led to irresponsible actions, negligence, and lack of compliance to environmental standards. These have destroyed the environment.
5.2 CONCLUSION

It has been observed that the Catholic Church has notable potential, especially viable systems for environmental conservation. The church has the duty and capability to disseminate environmental conservation practices among its members. This is because the parishioners and other individuals at the local level initiate and own the process of environmental conservation and thus its effectiveness. The Catholic Church has three major Ecclesial Associations: Catholic Women Association, Catholic Men Association and Youth. These groups are engaged in disseminating environmental information and awareness. The study utilized liberative solidarity model which calls for the Church to be in solidarity with the weakest part of the whole creation. It opts for a new ecological solidarity which promotes life and environmental stewardship in the earth community. It is apparent that Christians are best placed to spearhead grass root environmental conservation and the establishment of suitable environmental guidelines because of their capacity as members of the society.

5.3 RECOMMENDATIONS

The research findings shows that there is significant degradation of natural resources such as soil, air, forests, and water in Kericho County. This is mainly attributed to economic and human activities. It is noted that the causes of soil degradation include poor farming methods. Prolonged poor agricultural practices have also contributed to declining soil fertility especially on the mountainous and highland regions of Kericho County. This calls for the need to train and encourage farmers to embrace proper
farming methods such as the use of organic manure and planting of cover crops in their farms in order to enhance fertility and the texture of the soil.

Deforestation is attributed to illegal logging to meet timber and charcoal needs. Also, the research findings showed that population pressure has led to clearing of forests for agricultural and residential purposes. The residents of Kericho county should be encouraged to use alternative source of fuel such as biogas fuel which greatly reduces the amount of firewood that is utilised. In addition, people should be educated on government policies which prevail upon them to protect the environment.

Overgrazing witnessed across the Kericho County has resulted in the depletion of the natural vegetation. It has rendered most top soils bare and sandy, thus making the survival of plants impossible. When more animals compete for the same pasture, they may exceed the productivity of the area and destroy the vegetation cover thus accelerating erosion. Agricultural extension officers should advise farmers to rear a small number of livestock in their farms. In addition farmers must be advised to establish zero grazing units and also to sell off their stock when the prices are high. This is crucial because the farm sizes are small thus making it difficult to keep a large number of livestock.

The research findings also show that dirty water from homes and sewage systems is channeled or directed into water sources. These include springs, water furrows, wells, rivers and underground water. The increased and widespread rate of water pollution has far-reaching negative health and environmental consequences. Therefore, proper
sewage systems and treatment facilities should be constructed so as to ensure that sewage is treated before being channelled to the water sources.

From the research findings, it is noted that improper disposal of garbage is common in Kericho town; Ainamoi division. This includes household and industrial waste. A great deal of waste generated is illegally dumped in open spaces leading to physical accumulation or its discharge to fresh water as effluents. Appropriate technologies and modern facilities for collecting and recycling waste should be put in place. This will ensure proper management of both biodegradable and non-biodegradable waste. Also, the residents should be encouraged to separate biodegradable waste from non-biodegradable waste before disposal.

The extreme poverty poses a threat to the environment in Kericho County. The research findings showed that in the rural areas of Ainamoi, farmers are cutting down on fallow periods due to scarcity of land. The fallow periods are insufficient for trees to grow and this leads to soil erosion. The people in the rural areas are often forced to cut down trees for fuel. Although this is a poor source of fuel, the people have no alternative, thus worsening deforestation and encouraging erosion. The government and the church should ensure steady economic development in order to eradicate poverty and improve the livelihoods of the people. Therefore people should engage in activities that enhance and sustain the environmental resources for the future generation.

The research findings also revealed that most of the environmental programmes within the Catholic Church are carried out only once in a year. Therefore, there is need to implement these environmental initiatives regularly in order to create awareness on
environmental conservation. In addition, in some educational programmes, the catholic social teachings are not sufficiently integral and explicit. Hence, the catholic faithful should be equipped with knowledge on the basic content of the catholic social teaching. This will ensure sufficient awareness, advocacy and commitment to responsible stewardship of the environment in Kericho County.

From the research findings it was noted that environmental experts in Kericho County are few and therefore the Catholic Church often does not have adequate trained personnel to carry out various environmental programmes. Thus it is difficult to train every parishioner on environmental conservation. The church should work together with the government to ensure that more environmental experts are trained and deployed to these areas. In addition, the Catholic Church should focus on training its own personnel. The Church can assist in providing direction; in forming new values that stress individual and joint responsibility towards the environment. A well informed population on environmental policies and values on the need to manage the natural resources is likely to enhance sustainable use of natural resources. This can be done through offering of periodic sermons and teachings on environmental conservation. The church can also organise seminars in order to teach the people on the importance of protecting the natural resources.
5.4 SUGGESTIONS FOR FURTHER STUDY

This study was guided by specific objectives; hence further research could be directed on the following areas: First, investigation could be carried out on the constraints facing the Catholic Church on environmental conservation in Kericho County.

Investigation could also be done on how environmental education can be incorporated in the social teachings of the Catholic Church in Kericho County. It is clear that in some instances the catholic social teachings are not sufficiently integral and explicit. As a result, many catholic faithful are not familiar with the basic content of Catholic Social teaching and their relevance in environmental conservation. More fundamentally, many Catholic faithful do not understand the social teachings of the church as an essential part of the catholic faith.

Finally, investigation could be carried out on how the church leaders/clergy disseminate the policy of the Catholic Church on environmental conservation in Kericho County. The clergy can draw comprehensive specialized knowledge and personal initiative because of their vast knowledge on biblical teachings on the environment. This makes them best placed to disseminate the policy of the Catholic Church on environmental conservation.
REFERENCES


Data accessed, February 2012


Ecotheology: Voices from South and North. Maryknoll, New York: Orbi
Books.

Dieter.T Hessel and Ruether Rosemary (Eds.) Christianity and Ecology; 
Massachusetts: Harvard University Press.

Maryknoll: Orbis Books.

Hessel, D.T and Ruether R. (Eds.) (2000), Christianity and Ecology; Massachusetts: 
Harvard University Press.

New Haven: Yale University Press.

and Sacraments”, In Christiansen, D & Grazer, W (Eds).And God Saw that it 
was Good: Catholic Theology and the Environment. Washington DC. United 
States Catholic Conference.

Jerie, S (2010). ‘The Role of the Church in Sustainable Environmental Management in 
Zimbabwe: A Case Study of the Bulawayo Archdiocese of the Roman Catholic 
Church’ A Journal of Sustainable Development in Africa (Volume 12, pg. 8) 
Clarion University of Pennshjuana, Pennsylvania.

Soils Bulletin No 50. Rome, Food and Agriculture Organization.


www.peopleandwildlife.org.uk.../CONFLICT%20w and p misaim…
Data accessed August 2012


APPENDICES

APPENDIX 1: RESEARCH INSTRUMENTS

APPENDIX 1.1 QUESTIONNAIRE FOR PARISHIONERS

My name is Bett Geoffrey Kiptoo, I am a Master of Arts student at Kenyatta University currently conducting a research entitled, ‘The Contribution of The Catholic Church on Environmental Conservation and Management in Kericho County’. I am requesting you to kindly fill in all parts of the questionnaire and give additional information in the blank spaces provided. The information provided will be kept confidentially and will be used for the purpose of the study. Please give your opinion on the relevant item, tick correctly and provide relevant and brief explanation where applicable.

**Background information:**

Name (Optional) ……………………………. Gender a) Male ☐
b) Female ☐

Area of Residence ___________ Parish ___________

1. Do you engage in soil, water and forest conservation?
   
i. Yes ☐ No ☐

   ii. If yes, in which ways?(Tick appropriate answer/s)

   a) Planting trees. ☐

   b) Protecting water catchment areas. ☐

   c) Constructing good drainage systems. ☐

   d) Proper ways of cultivation. ☐
e) Others, specify____________________

2. Are you aware of the causes of environmental degradation in Kericho County?
   i) Yes ☐ No ☐
   ii) If yes, suggest some of them:
       a) Cutting down of trees. ☐
       b) Poor farming methods. ☐
       c) Infrastructure development. ☐
       d) Waste disposal from industries. ☐
       e) Mining. ☐
       f) Greenhouse gas emission. ☐
       g) Smoke from industries. ☐
       h) Overgrazing ☐

3. Should members of your church be concerned about the destruction of forest, soil, and water pollution?
   i. Yes ☐ No ☐
   ii. If yes, why and in which ways?
       a) _____________________________________________
       b) _____________________________________________
       c) _____________________________________________
       d) _____________________________________________

4. Are there any existing programmes within the Catholic Church which aims at conserving and managing the environment?
   i. Yes ☐ No ☐
   ii. If yes, mention some of them;
       a) _____________________________________________
       b) _____________________________________________
5. Is your Church educating/creating awareness to Christians with regard to caring the environment?
   i. Yes [ ] No [ ]
   ii. If yes, in which ways?
      a) Offering sermons on environmental conservation.
      b) Holding seminars on environmental issues.
      c) Publishing of literature on environmental conservation.
      d) Educating Christians on government policy on protection of environment.
      e) Champion for waste collection.

6. Does the Catholic Church hold workshops to educate people on environmental pollution?
   Yes [ ] No [ ]

7. Is the Catholic Church involved in controlling air, water and soil pollution in your area?
   i. Yes [ ] No [ ]
   ii. If yes, in which ways?
      a) ____________________________
      b) ____________________________
      c) ____________________________
      d) ____________________________
8. Does the Catholic Church have soil conservation projects in your area?
   i. Yes [ ] No [ ]
   ii. If yes, where are they located?

9. Are you aware of the Christian teachings on environment in your church?
   i. Yes [ ] No [ ]
   ii. If yes, mention some of them:
      a) _________________________________________________________________
      b) _________________________________________________________________
      c) _________________________________________________________________

10. Does the Bible contain any biblical/Christian teaching about caring and protecting the environment?
   i. Yes [ ] No [ ]
   ii. If yes, what does it teach?

11. Are there best ways through which the Church can help its members to understand the Christian/biblical teachings on environmental conservation and management?
   i. Yes [ ] No [ ]
   ii. If yes, in which ways? (Tick appropriate answer/s)
      a) Offering sermons on environmental conservation. [ ]
      b) Holding seminars on environmental issues. [ ]
      c) Publishing of literature on environmental conservation. [ ]
APPENDIX 1.2: INTERVIEW SCHEDULE FOR FGDs FOR FARMERS, SAW MILLERS AND MINERS

1. How long have you been a resident of Kericho County? ______________

2. Do you receive business permits from the government to engage in sawmilling?
   i. Yes ☐ No ☐

3. Are you aware causes of destruction of environmental resources such as: water, forests, soil and air in this area?
   i. Yes ☐ No ☐
   ii. If yes, suggest some of them:
      a) Cutting down of trees. ☐
      b) Poor farming methods. ☐
      c) Infrastructure development. ☐
      d) Waste disposal from industries. ☐
      e) Mining. ☐
      f) Greenhouse gas emission. ☐
      g) Smoke from industries. ☐
      h) Overgrazing ☐

4. How can soil, forests and water be conserved?

   ____________________________________________________________
   ____________________________________________________________

5. In your opinion, does the church have a role to play in checking soil, water, and forest degradation?
   i. Yes ☐ No ☐
   ii. If yes, specify,
6. Are there any existing programmes within the Catholic Church which aims at conserving water, soil, air and destruction of forest in this area?
   i. Yes ☐ No ☐
   ii. If yes, specify some of them:

______________________________________________________________________

7. Where do you get information on environmental issues?

______________________________________________________________________

8. Are you aware the teachings of the Catholic Church on conservation and management forests, animals, soil, water and other environmental resources?
   i. Yes ☐ No ☐
   ii. If yes, mention some of them;

a) ___________________________________________________________________

b) ___________________________________________________________________

c) ___________________________________________________________________

9. Have you received any support from the church institutions to enhance conservation and management of environment?
   i. Yes ☐ No ☐

10. Is the local community contributing to soil, water, and forest conservation?
   iii. Yes ☐ No ☐
   iv. If yes, in which ways?(Tick appropriate answer/s)

   a) Planting trees. ☐

   b) Protecting water catchment areas. ☐
c) Constructing good drainage systems. 

d) Proper ways of cultivation. 

e) Others, specify______________________________

11. Do you get logs from forest to sustain your business? (saw millers) 

i. Yes  No

ii. If no, specify,______________________________

12. Does your business/farming activity have any effect on the environment? 

Yes  No

13. Are there best ways through which the Church can help its members to understand the Christian/biblical teachings on environmental conservation and management? 

i. Yes  No

ii. If yes, in which ways? (Tick appropriate answer/s) 

a) Offering sermons on environmental conservation. 

b) Holding seminars on environmental issues. 

c) Publishing of literature on environmental conservation. 

d) Champion for waste collection. 

14. Have you received any support from the government to enhance conservation and management of environment? 

i. Yes  No

ii. If yes, specify,______________________________
APPENDIX 1.3: INTERVIEW SCHEDULE FOR THE CLERGY.

1. What are the Christian teachings on environment?

2. How do you teach Christians on how to relate with their immediate environment?

3. What are the causes of environmental degradation in Kericho County?

4. What steps have you taken to address the challenges of environmental degradation?

5. How is the church educating/creating awareness on environmental issues?

6. Are there existing programme within the Catholic Church that aim at enhancing environment conservation and management of resources? Briefly explain.

7. What is the Catholic Church doing about air, water and soil pollution?

8. What approaches have you taken to involve the local community in environmental conservation and management?

9. Mention any challenges to effective conservation and management of environmental resources in Kericho County.

10. What support has the government given church institutions in order to make them more effective in enhancing environmental conservation and management?

11. Suggest what you think the government should do to enhance effective environmental conservation and management.
APPENDIX 1.4: INTERVIEW SCHEDULE FOR GOVERNMENT OFFICIALS/LEADERS

1. What is the nature of environmental degradation in Kericho County?
2. What is the response of the government regarding environmental care and protection?
3. What are the major causes of environmental degradation in Kericho County?
4. What ways does the government use to minimize environmental degradation?
5. What approaches have you undertaken to involve the local community in environmental conservation and management?
6. How does the Church support the government in environmental conservation and management?
7. Are you aware of any programmes within the Catholic Church that aim at enhancing environmental conservation and management in Kericho County? Briefly explain.
8. Which are the main challenges to effective conservation and management of resources in this area?
9. What project(s) of environmental conservation is your Ministry engaged in?
10. What challenges do you face in environmental conservation and management?
APPENDIX 2: CATHOLIC ENVIRONMENTAL PROGRAMMES

KENYA EPISCOPAL CONFERENCE

COMMISSION FOR PASTORAL AND LAY APOSTOLATE

SEVEN YEAR’S STRATEGIC PLAN
(JANUARY 2012 TO DECEMBER 2018)

PASTORAL APPROACH TO; ENVIRONMENTAL PROTECTION, CARE AND SUSTAINABILITY
INTRODUCTION

KENYA EPISCOPAL CONFERENCE (KEC)

The Kenya Episcopal Conference (KEC), a permanent institution, is the assembly of the Catholic Bishops in Kenya united and exercising together their Pastoral offices over Christ’s faithful, as shepherds of the Catholic Church in Kenya which they together promote by forms and means of Apostolate suitable to the circumstances of place and time, in accordance with the law, to promote the greater good which the Church offers to all mankind (CIC 447). The authority of the Kenya Episcopal Conference is vested in the Ordinary and Extra-ordinary Plenary Assembly. Currently there are 26 Catholic jurisdictions spread over 4 metropolitan provinces among them, 4 Archdioceses, 20 Dioceses, 1 Apostolic Vicariate and 1 Military Ordinariat.
## DATA OF CATHOLIC POPULATION IN KENYA

<table>
<thead>
<tr>
<th>Arch/diocese</th>
<th>Number of Faithful</th>
<th>Number of Priests</th>
<th>Number Of Parishes</th>
<th>Number of Educational Charitable Institutions</th>
<th>Organized CMA,CW A, YOUTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bungoma diocese</td>
<td>595,655.00</td>
<td>67</td>
<td>29</td>
<td>879</td>
<td>24</td>
</tr>
<tr>
<td>Eldoret diocese</td>
<td>487,547.00</td>
<td>69</td>
<td>41</td>
<td>788</td>
<td>81</td>
</tr>
<tr>
<td>Embu diocese</td>
<td>341,842.00</td>
<td>63</td>
<td>16</td>
<td>281</td>
<td>21</td>
</tr>
<tr>
<td>Garisa diocese</td>
<td>7,000.00</td>
<td>16</td>
<td>6</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Homa Bay diocese</td>
<td>423,408.00</td>
<td>49</td>
<td>27</td>
<td>97</td>
<td>158</td>
</tr>
<tr>
<td>Isiolo Vicariate</td>
<td>35,789.00</td>
<td>15</td>
<td>12</td>
<td>73</td>
<td>14</td>
</tr>
<tr>
<td>Kakamega diocese</td>
<td>443,360.00</td>
<td>103</td>
<td>34</td>
<td>520</td>
<td>252</td>
</tr>
<tr>
<td>Military ordinariat</td>
<td>9</td>
<td>21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kericho diocese</td>
<td>234,335.00</td>
<td>44</td>
<td>21</td>
<td>205</td>
<td>29</td>
</tr>
<tr>
<td>Kisii diocese</td>
<td>486,479.00</td>
<td>35</td>
<td>16</td>
<td>724</td>
<td>317</td>
</tr>
<tr>
<td>Kisumu diocese</td>
<td>463,100.00</td>
<td>73</td>
<td>34</td>
<td>866</td>
<td>107</td>
</tr>
<tr>
<td>Kitale diocese</td>
<td>180,000.00</td>
<td>54</td>
<td>24</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Kitui diocese</td>
<td>258,000.00</td>
<td>60</td>
<td>24</td>
<td>440</td>
<td>17</td>
</tr>
<tr>
<td>Lodwar diocese</td>
<td>69,145.00</td>
<td>49</td>
<td>21</td>
<td>305</td>
<td>38</td>
</tr>
<tr>
<td>Machakos diocese</td>
<td>898,871.00</td>
<td>138</td>
<td>58</td>
<td>1079</td>
<td>499</td>
</tr>
<tr>
<td>Malindi diocese</td>
<td>23,577.00</td>
<td>32</td>
<td>16</td>
<td>16</td>
<td>8</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Diocese</th>
<th>Budget</th>
<th>Priests</th>
<th>Deacons</th>
<th>Nuns</th>
<th>Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maralal diocese</td>
<td>43,386.00</td>
<td>30</td>
<td>12</td>
<td>140</td>
<td>11</td>
</tr>
<tr>
<td>Marsabit diocese</td>
<td>25859.00</td>
<td>28</td>
<td>12</td>
<td>81</td>
<td>12</td>
</tr>
<tr>
<td>Meru diocese</td>
<td>765,410.00</td>
<td>145</td>
<td>54</td>
<td>960</td>
<td>72</td>
</tr>
<tr>
<td>Mombasa Archdiocese</td>
<td>262,000.00</td>
<td>65</td>
<td>43</td>
<td>142</td>
<td>14</td>
</tr>
<tr>
<td>Murang'a diocese</td>
<td>788,645.00</td>
<td>94</td>
<td>35</td>
<td>366</td>
<td>20</td>
</tr>
<tr>
<td>Nairobi Archdiocese</td>
<td>1,323,320.00</td>
<td>527</td>
<td>108</td>
<td>229</td>
<td>70</td>
</tr>
<tr>
<td>Nakuru diocese</td>
<td>242,144.00</td>
<td>118</td>
<td>42</td>
<td>109</td>
<td>36</td>
</tr>
<tr>
<td>Ngong diocese</td>
<td>82,552.00</td>
<td>66</td>
<td>29</td>
<td>232</td>
<td>15</td>
</tr>
<tr>
<td>Nyahururu diocese</td>
<td>320,000.00</td>
<td>49</td>
<td>29</td>
<td>49</td>
<td>25</td>
</tr>
<tr>
<td>Nyeri diocese</td>
<td>76,900.00</td>
<td>83</td>
<td>31</td>
<td>108</td>
<td>45</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>8,878,324.00</strong></td>
<td><strong>2018</strong></td>
<td><strong>795</strong></td>
<td><strong>8711</strong></td>
<td><strong>1914</strong></td>
</tr>
</tbody>
</table>


1. In all the 26 Catholic dioceses in Kenya, we have three major Ecclesial Associations (Catholic Women Association, Catholic Men Association and Youth.)

2. The structure of the Catholic Church begins with the family (Basic Church), Small Christian Communities (Comprised of an average of 12 families each), Local Church or out station composed of Small Christian Communities, a zone, a parish, deanery, diocese, Ecclesiastical province and the national coordinating Organ (the Kenya Episcopal Conference)

3. The Catholic Church in Kenya plays an active role in offering charitable services to all God’s people without discrimination. In all Her projects, the Church gives prominence to
Sustainability and avoids any move towards dependency syndrome. Local contribution by target groups, beneficiaries and stakeholders in encouraged

**LOCAL CONTRIBUTION DURING THE PROJECT IMPLEMENTATION.**

1. The Kenya Episcopal Conference will provide office space, office equipment and stationery
- They will provide professional staff or the project implementation and subsidize their remunerations.
- They will provide Theologians who will facilitate development of the Pastoral letter on environmental care and protection
- They will use diocesan and National print and electronic media in publicity and campaign for environmental care and protection
- They will allow the project to be implemented in their National and diocesan Shrines, parishes, educational institutions and charitable institutions
- They will allow subsidized use of diocesan Pastoral centers for Capacity building programs
- Staff in our diocesan and national shrines will be used to manage the project especially seed multiplication and tree growing.

2. Capacity building target groups
- They will take care of their transport expenses in all workshops and seminars
- Time spent during workshops will be a local contribution. No allowances will be given.
- In every training participant will pay a registration fee of Kshs.500.
- All people trained at national level will give the training at other levels without expecting a pay.

**IN Volvement OF THE KENYA EPISCOPAL CONFERENCE IN ENVIRONMENTAL CARE AND PROTECTION**
- We have some Catholic institutions that promote farming and environmental care eg. Baraka farm in Nakuru
- The Church participates in district trade fares and demonstrate on environmental care and protection
- In both the National and diocesan Shrines, tree planting is going on though in a minimal way.
- In most of our institutions tree planting has been done but not to the expected extend
- When giving relief food during famine, we have a programme called food for work. Here people are given food after digging terraces in their field and in other cases planting trees.
- In all projects being implemented by the Kenya Episcopal Conference, environmental care and protection is considered across cutting issue hence given prominence
- A national consultative meeting for Catholic Men Association and for Catholic Women Association was successfully held in Malindi diocese from 1st to 5th December 2011 were
members were sensitized about the environmental protection care, protection and sustain ability project.

-Sensitization workshops and seminar on Environmental care and protection have already been done in Kisumu metropolitan dioceses (Kisumu Archdiocese, Homabay diocese, Kisii diocese, Kakamega diocese, Lodwar diocese,)

**PROJECTIONS**

A national Consultative meeting for the project implementation plan, monitoring and evaluation is scheduled to take place by March 2012. It will be attended by the Bishop Chairman, KEC Commission for Pastoral and Lay Apostolate, members of the National Coordinating office, National leaders of Ecclesial Movements and associations and Rectors of our National and diocesan Shrines.

3. KEYPARTNERS.

-The Kenya Episcopal Conference Commission for Pastoral and Lay apostolate deals with church partner agencies who are purely concerned with Evangelization. They include Mission Aachen, Mission Munich, and Propagation of faith. We emphasize on making the Church in Kenya to be self-reliant. This is being realized through organizing fundraising targeting all agents of Evangelization. Initiation of Income generating projects at all levels is also given province.

**THE SECRETARIAT**

The KEC Catholic secretariat is the National administrative, facilitative and coordinating arm through which the KEC implements and coordinates various Pastoral programs at the National level and undertakes all those responsibilities which express the mission of the Catholic Church in Kenya. It is composed of the Secretary General who is the Executive Officer of the Conference and the Staff of the secretariat comprising the National Executive Secretaries of the Commissions and their assistants.

**MANDATE OF THE KEC CATHOLIC SECRETARIAT**

KEC- Catholic Secretariat (Office of the Secretary General) was established in 1961. It is the national administrative, facilitative and coordinative arm of the Kenya Episcopal Conference. The bottom line focus is to support Dioceses in enhancing their capabilities for effective implementation of projects and programmes at the grassroots. It draws its vision and mission from Christ’s mandate adopted by KEC “You shall be my witnesses” (Acts 1:8)

**VISION**

To be efficient, effective, affective and faithful national administrative, facilitative and coordinative arm of Kenya Episcopal Conference in support of the integral pastoral mission of
MISSION STATEMENT

Inspired by the mandate of Jesus Christ “You shall be my witnesses” (Acts 1:8) lived by the Kenya Episcopal Conference and guided by the Word of God, Magisterium and the Social Teachings of the Catholic Church, The KEC-Catholic Secretariat is committed to quality coordination, facilitation and provision of modern technical support to Dioceses and other Catholic institutions of Holistic Evangelization.

CORE VALUES

i. Catholic Identity and witness, “You shall be my witnesses” (Acts 1:18)
ii. Faithfulness to the Catholic teachings
iii. Respect of the Dignity of the human person
iv. Integrity
v. Accountability and transparency
vi. Charity and service to all
vii. Building peace through Justice and Peace
viii. Communion and partnership

A Commission is a body constituted by the Bishops Conference for a specific mission of the Church to study, recommend and implement its findings in accordance with its mandate. A Commission comprises of at least two Bishops. Each Commission also has a National Executive Secretary who is the technical advisor and secretary to the Executive Committee of the Commission. The Secretary General is a member of all Commissions.

Currently we have 15 Commissions and 2 Non Commissions

1. Commission for Liturgy
2. Commission for Doctrine
3. Commission for Pastoral and Lay Apostolate
4. Seminary Episcopal Commission
5. Commission for Missions
6. Commission for Clergy and Religious – Liaison Committee
7. Catholic Justice and Peace Commission
8. Commission for Education and Religious Education
9. Commission for Social Communications
10. Commission for Ecumenism
12. Commission for Development and Social Services/Caritas Kenya
13. Catholic Health Commission of Kenya
14. Commission for Refugees, Migrants & Seafarers
15. Commission for Finance
COMMISSION FOR PASTORAL AND LAY APOSTOLATE

The commission is charged with the responsibility of promoting pastoral work in the country. This is done through capacity building in pastoral work, initiation of pastoral projects, resource mobilization, coordination, lobbying and advocacy. All agents of Evangelization at National and diocesan levels (Clergy, religious and Laity) are targeted.

Environmental Care and Sustainability is given prominence in All Pastoral Projects being implemented by the Catholic Church in Kenya. This is done in fulfillment of the command of God given to Man “The Lord God then took the man and settled him in the garden of Eden, to cultivate and care for it” (Genesis 2:15)

SITUATION ANALYSIS IN RELATION TO ENVIRONMENTAL PROTECTION, CARE AND SUSTAINABILITY

ASSETS

Land, Shrines, Churches, schools, homes for the physically challenged, seminaries and other assets owned by the Catholic Church in Kenya will be helpful during the project implementation

STRATEGIC ISSUES

1) Lack of coordination of environmental care and protection initiative in the Catholic Church
2) Lack of sufficient awareness, advocacy and commitment to responsible stewardship of the environment in Kenya
3) Deforestation problem and negative consequences of both land erosion and water retention.
4) Use of wood for fuel and burning clay bricks/pots
5) Bush burning, charcoal production and tree felling.
STRATEGIC OBJECTIVES:
1. To enhance coordination of Catholic Church in Kenya initiatives in environmental care and Protection right from family, Small Christian Community up to National Level
2. To sensitize and educate Kenyans on their urgent role of stewardship in environmental care and protection through proper management of environmental resources on a sustainable basis
3. To re-generate about 20% of forest cover in degraded National/diocesan Shrines, church compounds and church institutions land in the country, emphasizing water conservation trees around water sources. This will benefit nature and Kenyan population as a whole as they enjoy and experience God’s presence in a well managed environment.
4. To come up with sustainable land and water management projects that will challenge adults, youth and children to cherish environmental care and protection.
5. To come up with environment friendly sources of energy.
6. To build partnership with other likeminded organizations in the Country and provide opportunities for exchange programs.

STRATEGIES
1) National consultative and planning meetings on environmental care and protection
2) Bishops’ pastoral letter on environmental care and protection
3) Use of print and electronic media in promoting environmental care and protection
4) Capacity building training in environmental care and protection Creation of Catholic Education day
5) Incorporating education on environmental care and protection in our primary schools Pastoral Programme Instructions(PPI)
6) Seed multiplication as an income generating project
7) Rainwater harvesting projects-Water tanks for use in tree nursery management
8) Tree planting and agro forestry
9) Promoting use of Solar heating panels, bio gas and locally produced-energy – efficient stoves
10) Introduction of Catholic environment day
11) Networking with other religions, the government and NGOs in those areas that ensure environmental care and protection
12) Project follow-up monitoring and evaluation
SUSTAINABILITY
The project will be implemented within the Church structure right from family, Small Christian community to National level. It will be incorporated in the Church Evangelization, sensitization and capacity building programs. The forestation component will have to do exclusively with agro-forestry, involving community households planting trees in and around farms.

Diocesan tree nurseries will be managed throughout the project period using part of the proceeds got from sell of seedlings by Men, Women and Youth groups managing diocesan tree nurseries. The balance will be used for their sustenance and initiation of other relevant projects.

In the third year of project implementation period, community sensitization will be done on the need of coming up with different sources of energy that include: Use of Solar heating panels, biogas and locally produced energy efficient stoves. Environmental friendly income generating projects for youth out of school will be initiated to avert destructions of trees. This will include: Farming, entrepreneurship, to list but a few.
<table>
<thead>
<tr>
<th>MONTH</th>
<th>DATE</th>
<th>ACTIVITY</th>
<th>VENUE</th>
<th>PARTICIPANTS</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAN, 2014</td>
<td>24TH</td>
<td>Patrons meeting-Kericho County</td>
<td>Kericho Day Sec</td>
<td>Patrons</td>
<td>9.00am</td>
</tr>
<tr>
<td></td>
<td>31ST</td>
<td>Patrons meeting-Bomet County</td>
<td>Kyogong Boys Sec</td>
<td>Patrons</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td>FEB, 2014</td>
<td>1ST</td>
<td>Rally- Zone A and B</td>
<td>Londiani Girls Sec</td>
<td>All Ycsers</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td></td>
<td>8TH</td>
<td>Rally- Zone C and D</td>
<td>Kiptewit High</td>
<td>All Ycsers</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td></td>
<td>15TH</td>
<td>Rally- Zone E and F</td>
<td>Kong’otik Girls</td>
<td>All Ycsers</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td>MAY, 2014</td>
<td>17TH</td>
<td>Kipkelion Deanery YCS and patrons meeting</td>
<td>Mercy Girls</td>
<td>2 officials and patron</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td></td>
<td>17TH</td>
<td>Kericho Deanery YCS and patrons meeting</td>
<td>St.Francis Girls</td>
<td>2 officials and patron</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td></td>
<td>17TH</td>
<td>Litein Deanery YCS and patrons meeting</td>
<td>Kapsogut Boys</td>
<td>2 officials and patron</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td></td>
<td>17TH</td>
<td>Bomet Deanery YCS and patrons meeting</td>
<td>Olbutyo Girls</td>
<td>2 officials and patron</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td>JUNE, 2014</td>
<td>14TH</td>
<td>Feast of St. Anthony /Flag day collection</td>
<td>Kaplong Girls</td>
<td>All Ycsers</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td></td>
<td>26TH-28TH</td>
<td>Founders Weekend</td>
<td>Mji wa Furaha Nairobi</td>
<td>Diocesan officials</td>
<td>2.00pm</td>
</tr>
<tr>
<td></td>
<td>28TH</td>
<td>National Rally/ climax of Founders Weekend</td>
<td>Mji wa Furaha Nairobi</td>
<td>All Ycsers</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td>JULY, 2014</td>
<td>5TH</td>
<td>Bomet county rally</td>
<td>St.Michael Sec</td>
<td>All Ycsers</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td></td>
<td>12TH</td>
<td>Kericho county rally</td>
<td>Kipsigis Girls</td>
<td>All Ycsers</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td>SEPT, 2014</td>
<td>12TH-14TH</td>
<td>YCS Formation workshop</td>
<td>Sotik pastoral centre</td>
<td>2 Incoming officials, zonal, dean, Diocesan</td>
<td>2.00 m.p.</td>
</tr>
<tr>
<td></td>
<td>13TH</td>
<td>Patrons meeting</td>
<td>Sotik pastoral centre</td>
<td>Patrons from each Section</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td></td>
<td>14TH-19TH</td>
<td>Environmental Week</td>
<td>All Sections</td>
<td>All Ycsers</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td></td>
<td>20TH</td>
<td>Climax of Environmental Week/Diocesan rally</td>
<td>St.Monica Girls</td>
<td>All Ycsers</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td>DEC, 2014</td>
<td>6TH</td>
<td>National pilgrimage to Marian Shrine</td>
<td>Subukia –Nakuru</td>
<td>All Ycsers</td>
<td>9.00 a.m</td>
</tr>
</tbody>
</table>

Annual Registration- Ksh. 1000/= per school  
Kipkelion Deanery-Schools within zone A  
NB. Shoul be paid and cleared during Zonal rally  
Kericho Deanery-Schools within zone B  
Rally fee-ksh. 200/= per school  
Litein Deanery-Schools within zone C&D  
Schools to arrange for offertories during rally masses  
Bomet Deanery-Schools within zone E & F  
Enrollment fee Ksh.70/= per student  
Rally fee-Ksh.20/= per student  
Flag Day collection-20 percent remain in school  
Schools within-Londiani,Chempson,Kipkelion,Nyagacho  
ZONE B-Schools within –Kericho,Matobo,Keongo,Kipchichim,Kiptere  
ZONE C-schools within-Chebangang,Roret,Kebeneti,Litein,Mogogosiek  
ZONE D-Schools within- Kapkatet,Kaplong,Sotik  
ZONE E-Schools within- Ndanai,Kaplomboi,Siongiroi,Segemik  
ZONE F-Schools within- Marinyin,Mugango,Bomet,Longisa,Tegat  

PARISHES
<table>
<thead>
<tr>
<th>MONTH</th>
<th>DATE</th>
<th>ACTIVITY</th>
<th>VENUE</th>
<th>PARTICIPANTS</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAN, 2013</td>
<td>25TH</td>
<td>Patrons meeting-Kericho County</td>
<td>Kericho Tea Sec</td>
<td>Patrons</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td>FEB, 2013</td>
<td>1ST</td>
<td>Patrons meeting-Bomet County</td>
<td>St.Marys Girls</td>
<td>Patrons</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td></td>
<td>2ND</td>
<td>Rally- Zone A and B</td>
<td>Kericho High</td>
<td>All YCSers</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td></td>
<td>9TH</td>
<td>Rally- Zone C and D</td>
<td>Sosit Girls</td>
<td>All YCSers</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td></td>
<td>16TH</td>
<td>Rally- Zone E and F</td>
<td>Longisa Boys</td>
<td>All YCSers</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td>MAY, 2013</td>
<td>18TH</td>
<td>Kipkelion Deanery YCS and patrons meeting</td>
<td>Chepseon Girls</td>
<td>2 officials and patron</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td></td>
<td>18TH</td>
<td>Kericho Deanery YCS and patrons meeting</td>
<td>Kipchichim Sec</td>
<td>2 officials and patron</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td></td>
<td>18TH</td>
<td>Litein Deanery YCS and patrons meeting</td>
<td>Kaplong Boys</td>
<td>2 officials and patron</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td></td>
<td>18TH</td>
<td>Bomet Deanery YCS and patrons meeting</td>
<td>St.Michael Sec</td>
<td>2 officials and patron</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td></td>
<td>25TH</td>
<td>Litein Deanery Rally</td>
<td>Kabianga Boys High</td>
<td>All YCSers</td>
<td></td>
</tr>
<tr>
<td>JUNE, 2013</td>
<td>15TH</td>
<td>Feast of St. Anthony /Flag day collection</td>
<td>Kaplong Girls</td>
<td>All YCSers</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td></td>
<td>27TH-29TH</td>
<td>Founders Weekend</td>
<td>Mji wa Furaha Nairobi</td>
<td>Diocesan officials</td>
<td>2.00p.m</td>
</tr>
<tr>
<td></td>
<td>29TH</td>
<td>National Rally/ climax of Founders Weekend</td>
<td>Mji wa Furaha Nairobi</td>
<td>All YCSers</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td>JULY, 2013</td>
<td>6TH</td>
<td>Kipkelion Deanery Rally</td>
<td>Chepseon Complex</td>
<td>All YCSers</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td></td>
<td>13TH</td>
<td>Kericho Deanery rally</td>
<td>Poiywek Sec</td>
<td>All YCSers</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td></td>
<td>20TH</td>
<td>Bomet Deanery Rally</td>
<td>Kabusare Sec</td>
<td>All YCSers</td>
<td></td>
</tr>
<tr>
<td>SEPT, 2013</td>
<td>20TH-22ND</td>
<td>YCS Formation workshop/farewell</td>
<td>Sotik pastoral centre</td>
<td>2 Incoming officials, zonal, Dean, Diocesan</td>
<td>2.00p.m</td>
</tr>
<tr>
<td></td>
<td>21TH</td>
<td>Patrons meeting/election</td>
<td>Sotik pastoral centre</td>
<td>Patrons from each Section</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td></td>
<td>22ND-27TH</td>
<td>Environmental Week</td>
<td>All Sections</td>
<td>All Ycsers</td>
<td>9.00a.m</td>
</tr>
<tr>
<td></td>
<td>28TH</td>
<td>Climax of Environmental Week/Diocesan rally</td>
<td>Chepteny Boys</td>
<td>All Ycsers</td>
<td>9.00 a.m</td>
</tr>
<tr>
<td>DEC</td>
<td>7TH</td>
<td>National pilgrimage Subukia</td>
<td>Subukia Shrine</td>
<td>All Ycsers</td>
<td>9.00a.m</td>
</tr>
</tbody>
</table>

1. Annual Registration- Ksh. 1000/= per school
   NB. Should be paid and cleared during Zonal rallies
2. Rally fee-ksh. 200/= per school
3. Rally fee-Ksh.20/= per student
4. Student subscription-Ksh. 50/= per student per term
   NB. Ksh.30/= remains in school- forward Ksh. 20/= per student per term
5. Enrollment fee Ksh.50/= per student.
6. Flag Day collection-20 % of total collection remain in schools

ZONE A-Schools within-Londiani,Chepseon,Kipkelion,Nyagacho
ZONE B-Schools within –Kericho,Matobo,Keongo,Kipchichim,Kiptere
ZONE C-schools within-Chebangang,Roret,Kebeneti,Litein,Mogogosie
ZONE D-Schools within- Kapkatet,Kaplong,Sotik
ZONE E-Schools within- Ndanai,Kaplomboi,Siongiroi,Segemik
ZONE F-Schools within- Marinyin,Mugango,Bomet,Longisa,Tegat

PARISHES
<table>
<thead>
<tr>
<th>MONTH</th>
<th>DATE</th>
<th>ACTIVITY</th>
<th>VENUE</th>
<th>PARTICIPANTS</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAN 2012</td>
<td>21&lt;sup&gt;ST&lt;/sup&gt;</td>
<td>ZONE C</td>
<td>CHEBORGE BOYS</td>
<td>ALL YCSERS</td>
<td>9.00 A.M</td>
</tr>
<tr>
<td></td>
<td>28&lt;sup&gt;TH&lt;/sup&gt;</td>
<td>ZONE D</td>
<td>KAPSINENDET</td>
<td>ALL YCSERS</td>
<td>9.00 A.M</td>
</tr>
<tr>
<td>FEB 2012</td>
<td>4&lt;sup&gt;TH&lt;/sup&gt;</td>
<td>ZONE E</td>
<td>LUGUMEK</td>
<td>ALL YCSERS</td>
<td>9.00 A.M</td>
</tr>
<tr>
<td></td>
<td>11&lt;sup&gt;TH&lt;/sup&gt;</td>
<td>ZONE A</td>
<td>CHEPSEON COMPLEX</td>
<td>ALL YCSERS</td>
<td>9.00 A.M</td>
</tr>
<tr>
<td>MARCH 2012</td>
<td>3&lt;sup&gt;RD&lt;/sup&gt;</td>
<td>ZONE B</td>
<td>ST.FRANCIS GIRLS</td>
<td>ALL YCSERS</td>
<td>9.00 A.M</td>
</tr>
<tr>
<td></td>
<td>10&lt;sup&gt;TH&lt;/sup&gt;</td>
<td>ZONE F</td>
<td>MUYWEK</td>
<td>ALL YCSERS</td>
<td>9.00 A.M</td>
</tr>
<tr>
<td>MAY 2012</td>
<td>12&lt;sup&gt;TH&lt;/sup&gt;</td>
<td>KIPKELION DEAN MEETING</td>
<td>CHEPSIR BOYS</td>
<td>3 OFFICIALS</td>
<td>9.00 A.M</td>
</tr>
<tr>
<td></td>
<td>19&lt;sup&gt;TH&lt;/sup&gt;</td>
<td>KIPKELION RALLY</td>
<td>TAITA TOWETT</td>
<td>ALL YCSERS</td>
<td>9.00 A.M</td>
</tr>
<tr>
<td></td>
<td>19&lt;sup&gt;TH&lt;/sup&gt;</td>
<td>BOMET MEETING</td>
<td>KABUSARE</td>
<td>3 OFFICIALS</td>
<td>9.00 A.M</td>
</tr>
<tr>
<td></td>
<td>26&lt;sup&gt;TH&lt;/sup&gt;</td>
<td>BOMET RALLY</td>
<td>OLIBUTYO</td>
<td>ALL YCSERS</td>
<td>9.00 A.M</td>
</tr>
<tr>
<td></td>
<td>26&lt;sup&gt;TH&lt;/sup&gt;</td>
<td>LITEIN MEETING</td>
<td>NGARIET</td>
<td>3 OFFICIALS</td>
<td>9.00 A.M</td>
</tr>
<tr>
<td>JUNE 2012</td>
<td>9&lt;sup&gt;TH&lt;/sup&gt;</td>
<td>FEAST OF ST.ANTHONY</td>
<td>TENGECHA BOYS</td>
<td>ALL YCSERS</td>
<td>9.00 A.M</td>
</tr>
<tr>
<td></td>
<td>30&lt;sup&gt;TH&lt;/sup&gt;</td>
<td>NATIONAL RALLY</td>
<td>MJI WA FURAHA</td>
<td>ALL YCSERS</td>
<td>9.00 A.M</td>
</tr>
<tr>
<td>JULY 2012</td>
<td>7&lt;sup&gt;TH&lt;/sup&gt;</td>
<td>KERICHO DEAN MEETING</td>
<td>KERICHO DAY</td>
<td>3 OFFICIALS</td>
<td>9.00 A.M</td>
</tr>
<tr>
<td></td>
<td>7&lt;sup&gt;TH&lt;/sup&gt;</td>
<td>LITEIN DEAN RALLY</td>
<td>ST.MONICA GIRLS</td>
<td>ALL YCSERS</td>
<td>9.00 A.M</td>
</tr>
<tr>
<td></td>
<td>14&lt;sup&gt;TH&lt;/sup&gt;</td>
<td>KERICHO DEAN RALLY</td>
<td>KERICHO TEA BOYS</td>
<td>ALL YCSERS</td>
<td>9.00 A.M</td>
</tr>
<tr>
<td>SEPT. 2012</td>
<td>9&lt;sup&gt;TH&lt;/sup&gt;-14&lt;sup&gt;TH&lt;/sup&gt;</td>
<td>ENVIRONMENTAL WEEK</td>
<td>ALL SECTIONS</td>
<td>ALL YCSERS</td>
<td>9.00 A.M</td>
</tr>
<tr>
<td></td>
<td>15&lt;sup&gt;TH&lt;/sup&gt;</td>
<td>CLIMAX OF ENVIRONMENTAL WEEK/DIOCESAN RALLY</td>
<td>MERCY GIRLS</td>
<td>ALL YCSERS</td>
<td>9.00 A.M</td>
</tr>
<tr>
<td></td>
<td>21&lt;sup&gt;TH&lt;/sup&gt;-23&lt;sup&gt;RD&lt;/sup&gt;</td>
<td>FORMATION WORKSHOP</td>
<td>SOTIK PASTORAL CENTRE</td>
<td>2 INCOMING ZONAL,DEANS, DIOCESAN, OFFICIALS</td>
<td>9.00 A.M</td>
</tr>
<tr>
<td></td>
<td>22&lt;sup&gt;ND&lt;/sup&gt;</td>
<td>SOTIK PASTORAL CENTER</td>
<td>SOTIK PASTORAL CENTRE</td>
<td>ONE PATRON</td>
<td>9.30 AM</td>
</tr>
</tbody>
</table>

ANNUAL REGISTRATION- 200/= PER SCHOOL
TERMLY CONTRIBUTION- 200/= PER TERM PER SCHOOL
STUDENT SUBSCRIPTION -10/= PER TERM PER STUDENT (40%) REMAIN IN SCHOOL
RALLY FEE -50/= PER SECTION (SCHOOL) -10/= PER STUDENT
FLAG DAY -20% REMAINS IN SECTIONS
ENROLMENT FEE -50/= PER STUDENT
# APPENDIX 3. LIST OF INFORMANTS

<table>
<thead>
<tr>
<th>NAME</th>
<th>DATE</th>
<th>OCCUPATION</th>
<th>PLACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Kirui Samson</td>
<td>O.I. 24-06-2013</td>
<td>Agricultural Extension Officer</td>
<td>Londiani</td>
</tr>
<tr>
<td>2. Mutai Jaret</td>
<td>O.I. 14-11-2012</td>
<td>Agricultural Extension Officer</td>
<td>Bureti</td>
</tr>
<tr>
<td>3. Ruto Nicholas</td>
<td>O.I. 18:04-2013</td>
<td>Agricultural Extension Officer</td>
<td>Ainamoi</td>
</tr>
<tr>
<td>4. Obura Michael</td>
<td>O.I. 17.01.2013</td>
<td>Environmental Officer</td>
<td>Kericho</td>
</tr>
<tr>
<td>5. Cheruiyot Agnes</td>
<td>O.I. 23-03-2013</td>
<td>Catholic Dev/Agri. Officer</td>
<td>Kericho</td>
</tr>
<tr>
<td>10. Talam</td>
<td>O.I. 22-04-2013</td>
<td>Farmer</td>
<td>Londiani</td>
</tr>
<tr>
<td>11. Koech</td>
<td>O.I. 22-04-2013</td>
<td>Farmer</td>
<td>Londiani</td>
</tr>
<tr>
<td>12. Cheruiyot</td>
<td>O.I. 02-05-2013</td>
<td>Farmer</td>
<td>Londiani</td>
</tr>
<tr>
<td>15. Ronoh</td>
<td>O.I. 4-02-2013</td>
<td>Farmer</td>
<td>Bureti</td>
</tr>
<tr>
<td>16. Sang</td>
<td>O.I. 7-05-2013</td>
<td>Village Elder</td>
<td>Bureti</td>
</tr>
<tr>
<td>17. Soi</td>
<td>O.I. 9-02-2013</td>
<td>Parishioner</td>
<td>Bureti</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Date</td>
<td>Status</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------</td>
<td>---------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>22</td>
<td>Kemei Charles</td>
<td>17-04-2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>23</td>
<td>Cheptoo veronica</td>
<td>17-04-2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>24</td>
<td>Gladys</td>
<td>20.02.2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>25</td>
<td>Sang Charles</td>
<td>20.02.2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>26</td>
<td>Koech Vincent</td>
<td>17-04-2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>27</td>
<td>Ronoh wesly</td>
<td>20.02.2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>28</td>
<td>Ronoh k</td>
<td>20.02.2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>29</td>
<td>Kiplangat Aron</td>
<td>17-04-2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>30</td>
<td>Koskey Charles</td>
<td>17-04-2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>31</td>
<td>Mutai</td>
<td>20.02.2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>32</td>
<td>Brayant</td>
<td>17-04-2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>33</td>
<td>Patricia</td>
<td>19-06-2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>34</td>
<td>Kipkoech samon</td>
<td>&quot;</td>
<td>Parishioner</td>
</tr>
<tr>
<td>35</td>
<td>Samwel k. cheruiyot</td>
<td>&quot;</td>
<td>Parishioner</td>
</tr>
<tr>
<td>36</td>
<td>Davies cheruiyot</td>
<td>20.02.2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>37</td>
<td>Chepkoech Agatha Biegon</td>
<td>17-04-2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>38</td>
<td>Mutai stephene</td>
<td>20.02.2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>39</td>
<td>Tonui Wesley</td>
<td>17-04-2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>40</td>
<td>Kirui cheruiyot Antony</td>
<td>20.02.2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>41</td>
<td>Chepkoech Faith</td>
<td>19-06-2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>42</td>
<td>Bore jesca</td>
<td>20.02.2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>43</td>
<td>Collins</td>
<td>20.02.2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>44</td>
<td>Chepkemoi Hilda</td>
<td>19-06-2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>No</td>
<td>Name</td>
<td>Date of Birth</td>
<td>Occupation</td>
</tr>
<tr>
<td>----</td>
<td>--------------------</td>
<td>---------------</td>
<td>------------------</td>
</tr>
<tr>
<td>45</td>
<td>Hillarry</td>
<td>17-04-2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>46</td>
<td>Kiget Philip</td>
<td>17-04-2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>47</td>
<td>Chelule Bilky Ruth</td>
<td>20.02.2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>48</td>
<td>Koskey Bernard</td>
<td>17-04-2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>49</td>
<td>Tonui</td>
<td>19-06-2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>50</td>
<td>Ronoh mercy</td>
<td>20.02.2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>51</td>
<td>Rotich Irene</td>
<td>17-04-2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>52</td>
<td>Chepkemoi Wilfrida</td>
<td>20.02.2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>53</td>
<td>Kibet victor</td>
<td>17-04-2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>54</td>
<td>Shaunah</td>
<td>19-06-2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>55</td>
<td>Langat Dominic</td>
<td>17-04-2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>56</td>
<td>Waminyu Robay</td>
<td>17-04-2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>57</td>
<td>Mitei Bernard</td>
<td>20.02.2013</td>
<td>Parishioner</td>
</tr>
<tr>
<td>58</td>
<td>Leleito mercy</td>
<td>17-04-2013</td>
<td>Parishioner</td>
</tr>
</tbody>
</table>

The list above does not include the names of the informants who did not indicate their names or those who sought anonymity.
Figure 1: Map of Kericho County Showing the Study Area. (Source: Kericho District Development Plan 2005 – 2009)