

**TEACHINGS AND PRACTICES OF THE FULL GOSPEL CHURCHES OF  
KENYA ON ENVIRONMENTAL CONSERVATION IN  
EMBU EVURORE DISTRICT, KENYA**

**ESTHER KARUANA RUBIRI**

**A Thesis Submitted to the Graduate School in Partial Fulfilment of the  
Requirements for the Award of a Degree of Master of Arts in Religious Studies  
of Chuka University**

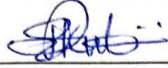
**CHUKA UNIVERSITY**

**OCTOBER 2024**

## DECLARATION AND RECOMMENDATIONS

### Declaration

This thesis is my original work and has not been presented for an award of diploma or conferment of degree in this or any other university.

Signature:   
Esther Karuana Rubiri  
AM16/29013/16


Date: 14/10/2024

### Recommendations

This thesis has been examined, passed and submitted with our approval as University Supervisors.

Signature:   
Prof. Dickson K. Nkonge  
Chuka University

Date: 14/10/2024

Signature:   
Dr. Moses K. Njeru  
Chuka University

Date: 14<sup>th</sup> Oct. 2024



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## **DEDICATION**

This work is dedicated to my dear husband, Francis Njagi, who was a source of my motivation, and my dear parents, the late David Rubiri and Teresia Wambura, for their insights that gave me hope and inspiration.

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## ABSTRACT

The basic subject of this study was the influence of the teachings and practices of the Full Gospel Churches of Kenya on environmental conservation in Embu Evurore District. God created the environment and the natural resources therein and ordered man to be its steward. Environmental degradation continues to be prevalent in Embu Evurore District through deforestation, soil erosion, siltation, and synthetic litter garbage, among others. The FGCK is active in environmental conservation, which is a pillar enshrined in its National Development Project. The church enlightens congregants by teaching them environmental practices to avert degradation. This process is referred to as environmental evangelism. However, the rate of environmental degradation is alarming, hence the concern in this study. The study's task was to evaluate the influence of the teachings and practices of FGCK on environmental conservation in the Embu Evurore District. The study was guided by the following objectives: To find out ways the congregants practice the teachings on environmental conservation in Embu Evurore District. To examine the effectiveness of the environmental conservation measures practiced in FGCK Embu Evurore District and to establish ways to improve the practices of environmental conservation in Embu Evurore District. The study outcome is important to future researchers in eco-theology, the church leaders and policymakers, and the congregants. Literature was reviewed on church teachings on environmental conservation, practices of church teachings on environmental conservation, effectiveness of environmental practices, and ways to improve environmental conservation. Behaviour Change Theory by B.F Skinner was used. In this theory, the individuals are victims of their society, which determines their behaviour. The study covered Embu Evurore District, an ecclesiastical District in the Full Gospel Churches of Kenya. The district has five Local Churches. A descriptive research design was adopted for the study. The study used questionnaires and interview schedules to collect the necessary information. An observation schedule was used to collect evidence of the effectiveness of environmental conservation measures used. Random sampling was used to identify the respondents among the congregants, while purposive sampling was used to identify the leaders to be interviewed. Using random and purposive sampling, 327 respondents from a population of 2032 congregants formed the sample for data collection. The collected data was analysed and presented through tabulation, charts, and graphs. From the findings, congregants' methods of environmental conservation contributed to the conservation of the environment in Embu Evurore District. The study established that environmental conservation in FGCK Embu Evurore District was not adequate. The study recommended further support and improved structure to strengthen the practices to achieve tangible results. Further research can be done on Christian's response to mitigate climate change. The study is significant in Eco-Theology and religious studies as it provides literature for future studies.

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## **ABBREVIATIONS AND ACRONYMS**

<b>ASAL</b>	-	Arid and Semi-Arid Lands
<b>CHEP</b>	-	Community Health Evangelisation Programme
<b>FAO</b>	-	Food and Agriculture Organisation
<b>FGCK</b>	-	Full Gospel Churches of Kenya
<b>FIDA</b>	-	Finish International Development Agency
<b>LCA</b>	-	Local Church Assembly
<b>NDP</b>	-	National Development Project
<b>NEMA</b>	-	National Environmental Management Authority of Kenya
<b>NOAA</b>	-	National Oceanic and Atmospheric Administration
<b>PCEA</b>	-	Presbyterian Church of East Africa
<b>SALM</b>	-	Sustainable Agricultural land management
<b>SPSS</b>	-	Statistical Package for Social Sciences
<b>UNDESA</b>	-	United Nations Conference on Sustainable Development
<b>WCC</b>	-	World council of Churches

# CHAPTER ONE

## INTRODUCTION

### **1.1 Background to the Study**

The environment consists of natural resources upon which man depends for his survival. Environment is critical for survival of all life on Earth. Recently, the environment has suffered degradation due to natural events and human activities (Ndung'u, 2013). Destruction of natural resources threatens the survival of man. The man at creation was put in the Garden of Eden to work and take care of it (Gen 2:15). Man is accountable to God as a steward over all things that God created. This is the reason why God commanded him to subdue the Earth and have dominion over it (Gen 1:26). God makes man rule over the works of his hands (PS 8:6-8), and one of the best ways that man can do this is through conservation of the environment. The church derives the command of its teachings from the Bible. The influence of these teachings informs the practices of environmental conservation by congregants as stewards of God-created environment.

The environment comprises the lithosphere, hydrosphere, biosphere, and the atmosphere, all created by God. God was pleased with his work (Gen 1:31). Geisler (1996) aver that God has entrusted the earth and all creation to our care. There is a need to be accountable with the resources. We should not squander the valuable resources. The earth belongs to God. We are just keepers of his garden. By putting into practice, the church's teachings on environmental conservation, we should neither turn God's garden into arid places nor His seas into cesspools (Geisler, 1996).

Man's interaction with the environment has seen him cause degradation. This is despite the church's teachings on environmental conservation measures in a bid to sustain this generation and its benefactors. The environment has suffered degradation due to overgrazing, deforestation, and mechanized agriculture (Gottlieb, 1996). He highlights how this has led to environmental degradation despite the church's teachings on environmental conservation.

The hydrosphere is the mainstay of the modern blue economy, encompassing the ocean and its resources. The UN Ocean Conference in June 2022 observed that rapid

degradation is due to current global economic system. The ocean health through poor management and unsustainable exploitation of marine resources, marine and coastal habitats have been destroyed, and polluted. This is through fishing, aquaculture, tourism, marine transportation, and in sectors like ocean renewable energy. Christians are part of the environment and stewards of ocean life and activities. Church teachings guide their activities on environmental conservation.

Gitau (2000) rightly observes that as responsible stewards, Christians must embrace environmental ethics, stipulating what they should do regarding nature or the material universe. If the church is to fulfill its environmental mission, it has to deal with the challenges of stewardship. Church teachings should influence their moral duty to care for the environment for their own good and future generations. According to Bett (2015), the leading global environmental problems include acidic precipitation, atmospheric pollution, and the destruction of the ozone layer, and global warming, which is a result of man's activities, which church teachings should inform on environmental conservation.

Douglas (2006) asserts that church leaders can draw specialized knowledge and person initiative because of their vast knowledge of biblical teachings on the environment. This makes them best placed to spearhead grassroots environment conservation by allowing congregants to become aware of how to conserve the environment. Gottlieb (2003) opines that environmental degradation is a health danger and an economic catastrophe. Degradation is an aesthetic blight. It is sacrilegious and sinful. It is an offense against God. The church leadership is positioned in such a way that they can teach the congregants the best environmental practices.

Nkonge (2016) proposes Oiko-theology as a way of helping conserve the environment. Oiko, the home of man, forms his environment. Eco-theology teaches man how he ought to conserve the environment. Through conservation practices, Christians must jealously take care of the earth as their home. He quotes Hamadi (2011) and attests that globalization makes the world a small village. This globalization has many advantages to developing countries, including social and natural environmental factors. Quoting Rasmussen (1994), Nkonge points that

ecumenism treats all inhabitants as a singular family, human and non-human together. This fosters the unity of that family. Human beings are trustees/caretakers of the creation. The church is made up of beings and thus has the role of teaching and practicing environmental conservation.

According to Grazer (1996), environmental justice logically complements church teaching on peace. The church human centered view of the earth is important because it sustains human life. Human practices are to support regeneration of resources for this generation and future generations so that man will be at peace with the environment. However, minimal environmental conservation intervention programs are due to insufficient financial resources (Marion & Marek, 2013). Grazer (1996) and (Marion & Marek, 2013) attest to the urgency of possible solutions to enhance environmental conservation.

The personal letter "African Faith Commitments for a Living Planet," published by the Kenya Episcopal Conference in June 2012, invites all church believers to prioritize their engagement with environmental care. Prioritizing environmental care is a way of appreciating and advancing the creative mission of God, whose image human beings bear. In addition, the Episcopal Conference of June 2012 initiated education programs on environmental stewardship based on church social teachings. This has targeted the clergy, seminarians, catechists, and youth associations. They can integrate environmental issues into their mission of teaching the good news in their churches, which has enabled the conservation of the environment.

Gitau (2000) points that in Africa; environmental conservation contributes to the survival of human life. The initiatives of environmental conservation are of great concern because of their long-term contribution to the survival of life. Under development in Africa has a negative bearing on the environment. This is embodied in soil erosion, overgrazing, and deforestation in certain parts of Africa. Threats and challenges to environmental conservation include overexploitation of resources and encroachment of natural habitats by increased human population. Gitau (2000) observes closure of wildlife migrating corridors and dispersal areas, recurring droughts and land degradation as challenges to environmental conservation.

Inequitable sharing of benefits accruing from use of natural resources manifest in the poor state of the environment in African countries.

Nkonge (2012) opines that African nations are caught up in great problems, including pollution and environmental degradation. Murekezi (2004) notes that humankind should learn to differentiate between stewardship and ownership. We are not landlords of this world and the rest of creation. Our God is still in control of the world and everything in it. Therefore, we ought to be caretakers as the church with biblical stewardship attitudes. The study sought to find out how the church, as an environmental steward, practices environmental conservation measures.

Agriculture is the mainstay of Kenya's population, especially the underprivileged and those who are food insecure. Small-scale farming activities involve crop and animal production. These activities clearly affect the environment (FAO, 2012). Whereas the fertilizer and pesticides increase crop yields, they reduce water quality and aquatic diversity. The church has the task of teaching its members about the best agricultural activities that help conserve the environment.

In Kenya, Christians claim the largest percentage of followers, with 85.5% of the population being Christians (Lindell, 2016). The implications of this percentage for environmental issues are quite critical. This leads one to question how the church propagates environmental issues and awareness in Kenya. Christians, look unto God as their creator. It is their duty to protect the environment by revering the whole of God's creation. Environmental conservation is vital in environmental sector where Christians are envisaged under exploitation of forests, marine resources, land degradation, water management, and biodiversity [United Nations Conference on Sustainable Development (UNDESA, 2012)].

Human activities are a factor cited by Kiarie (2020) as degrading the environment in Kenya and the globe. He points out that in Kenya; this is evidenced by dangerous activities to the environment, like forest encroachment for settlement, farming, and lumbering purposes. Eventually, these activities have a ripple effect, destroying water catchment areas.

The church acts as the conscience of society, and as such, it should be conscious and responsive to the destruction of environmental resources that threaten the existence of humanity (Kiarie, 2020). The church community is part of this environment, suffering from deplorable conditions, and, therefore, needs to identify its teachings concerning environmental conservation. The environment is vital for the survival of all life on the face of the earth, be it in water or land. If not conserved, it can cause the extermination of all life through threats like deforestation, burning of fossil fuels, emissions from industries, and running engines (Segar, 2020). Practicing environmental conservation is as important as any other God-given command as it is service to God and obedience to God's call to environmental stewardship.

Nginda (2023) asserts that the church is a formidable institution with a wide-reaching influence and has the potential to play a pivotal role in sustaining the environment. He observes that the church should wire important information to the church through two major platforms: education and awareness and moral and spiritual guidance. Nginda ascertains that the church has the role of informing and guiding the congregants. This study sought to find out whether the congregants are aware of environmental degradation and are informed of the conservation measures to employ to improve the environment.

Whereas the environmental crisis is a global concern touching governments, it has also been a church concern, with the Full Gospel Church of Kenya (FGCK) having it as a matter of concern. The Full Gospel Churches of Kenya have environmental sustainability as one of its social pillars. The pillars envisage Education, Health, Missionary work, and welfare institutions. In its revised Constitution 2013 edition, the fourth objective captures establishing and administrating institutions, namely schools, hospitals, and colleges, and training persons therein or elsewhere for missionary work. In line with this objective and under the welfare institution, the FGCK established a National Development Project (NDP) with a long-term plan of managing, preserving, and enhancing the quality of the environment. To enhance the project's success, the church works with like-minded institutions such as FIDA. The church has adopted the FIDA Development and Cooperation Policy Document to empower everyone's life and habits to be more environmentally healthy. One key point of the policy was to have theological criteria for environmental issues be reflected. The Full Gospel

Church of Kenya offers this theological criterion in its teachings on environmental conservation. Nginda (2023) noted that the church is a beacon of moral and spiritual guidance. Incorporating environmental stewardship in its teachings can inspire congregants to recognize that the earth is sacred and that conserving is essential. The aim is to address people's physical needs by changing their attitudes, worldviews, mind sets, and values for essential, lasting behaviour change (Odour, 2022).

Tree felling to burn charcoal has resulted in low-fertility soil and loss of tree cover (Kawira & Otzelberger, 2017). This study was suitable for this area because the environment had suffered degradation due to human activities like tree felling, bush clearing, and poor farming methods. The state of the environment was also affected by human negligence, such as soil erosion. Despite teachings by the church on environmental conservation practices, streams turn into dry valleys, and rainfall and whirlwinds intensely erode the soil, leading to imminent drought conditions that threaten human life.

The implementation of environmental conservation under the National Development Project in Embu Evurore District dates back to 2017 when some congregants were trained to disseminate information on environmental conservation (FGCK, Kanyuambora narrative report files 2016). The congregants were to practice this on their farms, but despite the teachings, environmental degradation rages. With this concern, the teaching and practices on environmental conservation were assessed since there was continual environmental degradation in Embu Evurore District. The research sought to find out the influence of the FGCK teachings and practices on environmental conservation in the Embu Evurore District.

## **1.2 Statement of the Problem**

The Environment of the Full Gospel Churches in Embu Evurore District suffers from degradation. This is despite the Full Gospel Churches of Kenya's teachings and practices on environmental conservation. The pertinent question, therefore, is whether the teachings on environmental conservation influence the Congregant's conservation practices. The question is whether the Full Gospel Church of Kenya in Embu Evurore District disseminates and implements the information in a way that the congregants understand. As such, there was concern about the influence of the teachings and

practices of the FGCK Embu Evurore District on environmental conservation. This research study sought to determine the influence of environmental conservation teachings and practices in FGCK Embu Evurore District.

### **1.3 Purpose of the Study**

This study aimed to evaluate the influence of the teachings and practices of the Full Gospel Churches of Kenya in improving environmental conservation in Embu Evurore District.

### **1.4 Research Objectives**

The following objectives guided this study:

- i. To find out how the congregants practice environmental conservation teachings in FGCK Embu Evurore District.
- ii. To examine the effectiveness of the environmental conservation measures practiced in FGCK Embu Evurore District.
- iii. To establish ways to improve practices on environmental conservation in FGCK Embu Evurore District.

### **1.5 Research Questions**

Based on the research objectives, the study sought to answer the following research questions:

- i. How do congregants in FGCK Embu Evurore District practice the teachings on environmental conservation?
- ii. How effective are the environmental conservation measures practiced in FGCK Embu Evurore District?
- iii. How can the environmental conservation measures practiced in FGCK Embu Evurore District be improved?

### **1.6 Significance of the Study**

The study was urgent because the environment in Embu-Evurore District continues to suffer degradation. The issue of environmental degradation should be addressed with the urgency it deserves, otherwise, environment may not sustain the life that man was commanded to care for. The findings of this study will benefit future Researchers in Religious studies, especially in the areas of Eco-Theology, Natural Theology,

Religion and Environment. The study falls in the perspective of the sociology of religion. The study will add more literature on their religious knowledge. The study will benefit church leaders in the FGCK and other religious denominations by adding insight into their policy and decision-making regarding environmental conservation. The study will generate information that could be helpful to help the national and county governments engage in environmental conservation. The study's findings will challenge the church to re-examine its global contribution to environmental conservation.

### **1.7 Scope of the Study**

The study examined the influence of environmental conservation teachings, practices, and effectiveness in the Full Gospel Churches of Kenya in Embu Evurore District. It was confined to the Full Gospel Churches of Kenya in Embu-Evurore District and conducted in five Local Church Assemblies: Kanyuambora, Ishiara, Kamumu, Kanthoki, and Gitii. The branches in the Local churches are Kanyuambora, Kavengero, Ganganga, Kavuru, Gitii, Karigiri, Kanyangi, Ishiara, Kianjeru, Ciangera, Kamumu, Milimani, Magaca, Gacianthukuri, Ivutuka, Kavairi, Kanthoki, Kieramba, Kogari and Kamunthigo. The study targeted leaders and congregants who were twenty years and above of all genders and classes.

### **1.8 Limitations of the Study**

The following were the limitations of the study:

- i. The geographical region was vast and remote, requiring traveling long distances, which made it expensive and time-consuming. Despite the challenges, the researcher was able to visit the churches using versatile means like motorbikes.
- ii. The church leaders expected the study outcome to bring grants and aid from the government or non-government organisations. The researcher explained to them that the study was for academic purposes only. The researcher explained the academic purpose of the study to interested respondents.

### **1.9 Assumptions of the Study**

The study was anchored on the following basic assumptions:

- i. Congregants should embrace environmental conservation as taught by the Church.

- ii. The conservation measures practiced in FGCK Embu Evurore District conserve the environment.

### **1.10: Operational Definition of Key Terms**

<b>Branch</b>	: Unit of FGCK congregation of worshipers under a Pastor.
<b>Church</b>	: A place where Christians gather for worship and also Christians religious activities.
<b>Congregants</b>	: Members of the church.
<b>Congregation</b>	: Adherents of FGCK denomination.
<b>Conservation</b>	: Practice of protecting natural resources.
<b>Degradation</b>	: The act of damaging the environment
<b>District</b>	: Two or more FGCK local churches under the leadership of a Bishop
<b>Environment</b>	: The totality of the surrounding and the resources therein.
<b>Environmental Conservation</b>	: Practice of Protecting natural resources through safe and efficient use.
<b>Leaders</b>	: People tasked to pass information on conservation practices.
<b>Local Church Assembly Practices</b>	: Group of FGCK branches under leadership of a Reverend.
<b>Steward</b>	: Congregants with duty to take care of the environment.
<b>Teachings</b>	: Information passed to the congregants in relation to Environment Conservation.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Church Teachings on Environmental Conservation**

Environmental degradation threatens creation given to humanity by God as something indispensable for human life and development. Human beings must make good use of the natural resources. In imparting social knowledge, the Church has priority teachings on conservation agriculture, agroforestry, community health education, and resource mobilization (Borr, 2016). Christians are best placed to spearhead grassroots environmental conservation measures and establish suitable environmental guidelines because of their capacity as members of society.

The association between environmental conservation and the Church could be intensified through Christian worship. The Church incorporates essential elements: thanksgiving, offering, and praise. Taking care of the environment is one way of being thankful to God for the resources he has placed before man to take care of. Worshiping is feasible if Christians do not alienate themselves from the natural world to a spiritual intimacy. They should embrace spirituality of divinity revealed in words as well as spirituality of the divine as revealed in the visible world. Christians should be concerned with about us, from a spirituality concerned with justice to the devastated earth (White, 2016). White suggests that Christian's interaction with the environment was practical. However, he does not specify what Christians should be taught to help them show gratitude to God as they interact with the environment, which made it a concern in this study.

Gottlieb (1996) observes that the dominion granted to humans in Genesis 1:28 was not absolute. God was the creator, and human beings were God's creatures who had been called to care for, cultivate and preserve God's work (Gen 2:15). He further noted that the earth and its fullness, the world and those who dwelt in it belonged to the Lord (Psalms 24:1). Though he mentions the limitation of man in his dominion, he does not bring to light a guiding knowledge on the extent of man's interaction with God created environment. This study sought to bring to light the knowledge of church teachings that guides environment conservation.

The global environmental crisis was fundamentally moral and religious (Mukamure, (2013). He establishes that the environmental crisis was a religious issue and observed that environmental conservation required religious solutions. Therefore, the Church's solution through awareness of environmental conservation was a concern to this study.

Grazer (1996) echoes Pope John Paul's concern for the environment, which reflected God's presence and diversity. This God-centered approach to creation and environment called people to respect and reverence it as a pathway to union with God. Human beings were part of creation as stewards, not separate from it. Any concern about the care of the environment without guidelines on conserving it left room for poor stewardship due to a lack of awareness of measures to take to conserve the environment. This study explored the awareness of environment conservation measures that a good steward, in this case the congregant, was to be aware of.

The PCEA Church had a long-time plan for environment conservation with the theme of empowering the Church for its mission to all creation. One of the recommendations was education and awareness, where the Church was set to integrate theology and environment into the training and practice of the Church (Warui & Kairu, 2018). They mention that the PCEA Church had a plan on environmental conservation with a recommendation of educating people to make them aware of how to conserve the environment but were silent on ways to disseminate knowledge on how to conserve the environment. This study sought to find out how the Full Gospel Churches of Kenya Embu Evurore District congregants practiced their awareness of environmental conservation to conserve their environment.

Hinze (1996) argues that the Church's role in teaching emphasizes the universal common good, which was specified by the duty of solidarity. He noted that solidarity requires sacrificing our self-interest for the good of others and the environment we share. He further observes that the churches' role in imparting knowledge on authentic development supported the efficient use of environmental resources. Hinze (1996) does not mention how the teachings on environmental conservation impacted the Church to guide Christians in conserving the environment. It was the teachings

Christians were exposed to that influenced the churches' conservation measures for the common good of the environment that raised concern in this study.

## **2.2 Practice of Church Teachings on Environmental Conservation**

The Church's role in environmental conservation and awareness emerged from the comprehension of individuals as a component of the environment. Gichira (2009) acknowledges that Christians seek nature for signs of God's presence and reason. However, as this study sought to establish, he needs to show how man, as an individual component of the environment, is to practice environmental conservation.

Nkonge (2015) noted that God graciously gave us a home, and we inhabited it with other forms of life who were equal members. As such, sharing resources, and unity among ourselves, and other inhabitants were matters we could not take lightly. Caring for our environment are matters of concern. He emphasizes the care of the environment, but he needs to identify the methods that could be used to take care of the environment. This study sought to find out how the congregants applied environmental conservation measures to preserve the other forms of life on earth who were equal members in inhabiting the earth.

Muhia and Gathogo (2018) argue that environmental degradation dates back to Kenya's colonial period. He noted that the colonialists introduced new farming, mining, and hunting methods. The result was the clearing of large tracts of land. To pave the way for extensive commercial farming, trees were felled in their millions to provide raw materials for colonial domestic use and export to mother countries. Their bone of contention was how the environment was destroyed through human activities. However, they did not address how the environment could be conserved by redeeming it from the cruel hand of the man who has lorded over it without considering its sustainability. This study sought to find ways in which the congregants of Full Gospel Churches of Kenya Embu-Evurore District conserved the environment according to the awareness they received from the Church.

Religious leaders' task is to commend their adherents on using the earth with the view that all are stewards accountable for using resources entrusted to their care, Okollo (2019). The ways to evaluate the teachings by leaders, as suggested by Okollo (2019),

was a concern in this study as it sought to determine whether the congregants of FGCK Embu Evurore District practiced conservation measures effectively.

Clive (2010) observes that the World Council knew climate change mitigation was urgent and noted that the earth was in peril. He warns, the earth, our only home is in jeopardy. Human beings are at the precipice of self-destruction. To avert this crisis, eco-theology tries to make people understand that God never revoked His first commandment to man, to take care of the environment. Eco-theology appreciates that God is the Creator and was strategic and intentional with his work of creation. Clive did not identify actions to reverse the earth's peril or measures to save the earth from self-destruction. He notes that man was a glorified caretaker of the environment, enhancing the image of God in him. The conservation methods that help man care for the environment were a concern in this study.

Christians have the duty to appreciate the place of God in creation. They should appreciate the place of creation. Gichira (2009) observes that the Anglican Church of Kenya has taught some congregants living in arid areas how to use God-given resources in their environment, like water, to enhance their livelihood. Christians know they are part of the environment in which they are stewards. Gichira (2009) brings to light ways to utilize natural resources to earn a living, but he does not mention good stewardship in conserving these resources that had a place in God's heart. Therefore, the concern in this study was how man utilizes his knowledge to conserve the environment.

Ong'ong'a (1999) ascertains human beings as tenants of the world and God as the 'landlord' of all creation. Christians should utilize and protect natural resources to allow them to regenerate and be of use in the future. The Church emphasizes that the christans should realize that they have a responsibility within creation and a duty toward nature as an essential part of their faith. Christians, therefore, had to preserve the particular goodness of plants, water, soil, animals, and mineral resources. Misuse of these environmental resources would harm human beings and their environment. Ong'ong'a (1999) should have mentioned the methods Christians should use to conserve the environment, and therefore, this is a gap this study sought to close.

Thomson (2014) contends that for any substantial outcomes to be acknowledged in a healthy environment, individual and collective efforts must be made. The job of every individual Christian, collectively and individually, is fundamental. He believes Churches are institutions for creating awareness that has to instruct their church members on individual duties towards conserving the natural environment. The Church's role in environmental conservation is significant and in need. Churches are given tasks to instruct and anticipate that their members should perceive and value the provision of God. Thomson's (2014) view that churches create awareness, enabling members to be dutiful in conserving the environment, was a concern in this study since he did not mention Christian practices on environmental conservation.

Gichira (2009) noted that God endows environmental resources and expects them to assist everybody. Christians have a reason, obligation, and duty to mind and deal with the earth as stewards and trustees, not as negligible buyers and clients. He contends that a sound environment is a valuable asset that the present age has acquired and has to be safeguarded for who and what is to come. He further calls attention to how we care for these natural resources as a proportion of our stewardship and an indication of our regard for the Creator. He is particular about the obligation and duty of Christians as stewards of God-given natural resources but leaves out the methods they could use to conserve them. This study was concerned with finding out the practices used by the congregants to conserve the environment.

Sabyasachi (2023) outlines some steps to protect the environment. He notes that environmental protection was not just a responsibility but a duty. He identifies simple measures of environmental conservation, such as controlling the use of private means of transport to places of work. Instead, public means of transport should be used to control carbon emissions into the atmosphere. People could also ride or walk to the workplace. Sabyasachi (2023) notes that people need to plant more trees and put effort into caring for them to maturity. He notes that trees help to reduce the accumulation of harmful substances like carbon print in the atmosphere. He identifies the other environmental conservation methods as the safe use of electricity and efficient lighting. This was done by using energy-efficient bulbs, turning off lights when they were not in use and unplugging electronic appliances afterward.

Sabyasachi (2023) points out that people must avoid using single-use plastics like plastic bottles, bags, and utensils. Single-use plastic winded up in oceans, waterways, and landfills. He points out ways to conserve water, including shorter showers and low-flow water closet toilets. He observes that environmental conservation would be a vain task if children were not to participate in environmental conservation. To enhance a sustainable future, children must be educated and supplied with teeth to protect the planet. The child is to be encouraged to participate and learn about environmental conservation. He is quick to clarify the meaning of who a child is. He indicates that a child is any person, young or old, who does not know and is unconscious about environmental conservation regardless of age and education. He notes that a healthy environment improves the planet's health and personal well-being. This study concerned the conservation of the environment. It was keen to establish whether the congregants of the Full Gospel Churches of Kenya in Embu Evurore District observed the ways Sabyasachi (2023) mentioned in controlling environmental conservation.

Christie (2019) acknowledges that, from the perspective of the Church, social education is necessary for the planetary essential resources and further notes that there are objectives to conserve the environment for future generations and guarantee that humankind's contemporaries live with respect. Christie (2010) recognized church social education as necessary, but conservation methods were not explicit. This raised a concern worth investigating among the congregants of Embu Evurore District.

Howard (2017) contends that the degradation of the environment is not just an economic calamity but also an offense against God. He further contends that human economic activities influence the future of life on earth. Some of the human economic activities that were destroying and degrading the natural environment include poor waste disposal, overgrazing, and poor farming methods, which result in extreme destruction of nature. Howard (2017) does not offer conservation practices to mitigate economic practices that destroy the environment. The concern of this study was whether conservation measures were applied to create a healthy environment.

Maathai (2010) saw the deep wounds of the earth by artificial environmental devastation. The Green Belt Movement was based on tree planting on public land.

She asserts that, regardless of cultural or religious values, it was man's spiritual duty to take care of the environment, or man would go into extinction, and the earth would regenerate itself without man. It was in her recognition of religious values that congregants had the duty to conserve the environment by planting trees, as she spearheaded. The study was concerned with discovering the environmental conservation practices of congregants in the Embu Evurore District.

Blaikie and Brookfield (2015) ascertain that technological development and advancement prompted the destruction of the environment as raw materials for industrial production. They outline the factors resulting in the destruction of the environment, such as intensive resource depletion and air pollution. Humanity had misused, altered, and degraded nature to a degree that could barely offer economic sustenance to individuals. Hence, there was a requirement for the Church to play this pivotal role of Christians practicing conservation measures, which they did not outline. This study sought to ascertain the conservation measures used by the congregants in the Full Gospel Churches of Kenya Embu Evurore District.

Horrel (2015) ascertains that the Bible and Christian traditions had legitimized and encouraged humanity's aggressive dominion over nature. A new reading of the Bible was needed to enable congregants to meet the ecological challenges. He examined a range of Biblical texts that gave insight into environmental conservation. Church teachings on environmental conservation are geared towards good stewardship because Christians were not lords over nature but stewards through environmental conservation practices. He did not give the methods to apply in this conservation insight; they were a concern in this study.

Sayem (2019) asserts that religious-based environmental teachings, moral guidance, and eco-theological ethics are potential agents of environmental sustainability. Faith communities could discern this problem as their problem. He does not show the practices of environment conservation by the faith communities. This study sought to find out how the Church, as a faith-based entity, practices environmental conservation as influenced by its biblical teachings on environmental conservation.

Warui and Kairu (2018) observe that though the PCEA Church had a policy and strategy on environmental stewardship, most activities were still at the policy and strategy levels and had not been cascaded to local levels to realize tangible results. The findings by Warui and Kairu (2018) showed that the congregants needed to practice tangible environmental conservation practices. This formed a tangible reason for this study, as it sought to establish how the congregants practiced environmental conservation.

### **2.3 Effectiveness of Environmental Conservation Practices**

Bett (2015) agrees with Simmons (1974) that the increase in magnitude of industrial production creates environmental degradation. These, in turn, impair not only the usefulness of the environment but also its life-supporting capability. He further argues that technology affects the environment in three primary ways: in harvesting resources, emission of wastes during production process, and 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 need for modern facilities for proper disposal. Improper waste disposal has thus enhanced land degradation thus reducing the quality of the environment. Christians are entrepreneurs who own or work in industries. In their stewardship, Christians are supposed to dispose of waste in an environment-friendly way to conserve the environment. Bett (2015) explores the negative impact of industrial production, yet man's activity should have enhanced environmental conservation, which was the focus of this study.

Gottlieb (1996) noted that environmental degradation is not only a danger to health but also sacrilegious and sinful. It is an offense against God because it destroys God-given environment that humanity had been commanded to take care of. He further argues that man affects the future of the Earth's community by overgrazing and poor farming practices. Unplanned development project resulted in severe environmental destruction. Humans have long used air, land, and water resources as disposal sinks of the wastes they generate. These disposal practices left most wastes inadequately treated, thereby causing pollution. The environment is being threatened with disintegration. This is because of human sin and injustice, which result in the

oppression of both the people and nature. Gottlieb (1996) mentions man's activities as causing destruction instead of improving the environment, which is why this study sought to determine the effectiveness of environmental conservation practices in the Full Gospel Churches of Kenya's Embu Evurore District.

Rotich (2019) observes how man benefits from forests, especially from fuel wood, honey, and herbal medicine. Despite concerted efforts by the Kenya Wildlife Service and communities neighbouring the forest to conserve the forests, conservation challenges were rampant through illegal grazing, illegal logging, charcoal burning, forest fires, and forest encroachment. He observes that it was man's activities that threatened environmental conservation. Despite man's duty to steward the environment, he cannot counteract environmental degradation by using sound environmental conservation measures. This warranted this study, which sought to evaluate ways in which environmental conservation measures could improve the environment.

Msafiri (2007) points out that the search for basic needs undermines the capacity of human beings to manage natural resources wisely. For instance, many charcoal sellers engage in business to earn money to survive despite the massive destruction of forests and trees. Unless people experiencing poverty have alternative sources of food and basic needs like fuel, they, too, will destroy whatever natural environment around them for survival. The church was to guard environmental resources using environmental conservation measures effectively and jealously. However, he should have shown ways to take care of the environment in order to improve it.

Kiarie (2020) notes how human activities like poor farming practices loosen top soils, and as a result, soil erosion becomes inevitable. Unchecked illegal logging leads to the destruction of natural habitats and eventual exposure of the affected areas to agents of erosion. Whereas Kiarie (2020) exposes how human beings cause the degeneration of the environment, he needs to give possible ways to counteract the menace. He thus leaves a gap for this study to find ways the environment can be conserved.

Wangiri (1999) observes that the destruction of the ecological environment leads to destruction of the social environment. Modern technological agriculture destroys the soil and also pollutes the air. It results from losing topsoil through the felling of trees, overgrazing, and poor farming methods. Farmers have to eke out a living from poorer soils. These require heavier fertilizer inputs, which further degrades the soil. Wangiri (1999) fails to offer ways for agricultural practices to improve soil and vegetation. This study was concerned with conservation measures that improved the environment.

According to Gichere (2001), human activities, including agriculture, tourism, ranching, infrastructure developments, and human settlements, have often disregarded natural resources, thus destroying the environment. He further argues that the degradation of natural resources will adversely affect land productivity and increase poverty levels. As an environment caretaker, the church must create environmental conservation awareness so that the congregants can be dissuaded from destroying the environment. Gichere (2001) must mention the conservation measures to deter environmental degradation. In his practice, to conserve the environment, man should not destroy it, which raises concerns in this study.

Gitau (2000) rightly observes that environmental degradation results from chemicals in industry and agriculture that pollute the air, water, and soil. He further argues that cutting down forests destroys the natural habitat with thousands of living forms. Extractive industries like Mining are rapidly depleting sources of energy and mineral resources. The depletion of the ozone layer exposes the Earth's surface and atmosphere to harmful sun rays. This 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. God put man in a healthy environment to guard it to be in good health. Gitau (2000) displays the activities of man on the environment that result in environmental degradation but needs to show how to conserve the environment effectively. Christians with an awareness of environmental conservation practices should practice environmentally friendly conservation measures to preserve natural resources needed by man for survival. This study sought to establish this.

According to Ong'ong'a (1999), technological reasoning puts the environment at the mercy of scientists and technologists who treat it as a raw material for industrial production. He points out the causes of environmental destruction, such as increased population, resource depletion, and atmospheric damage. Humanity has exploited, modified, and destroyed environmental resources. The church is not separable from the society. Technologists and scientists are part of the church, and they ought to have advocated for environmentally friendly ways that help conserve the environment. This was an area Ong'ong'a (1999) was silent on and, therefore, a concern in this study.

Jonathan (2018) highlights how the traditional worldview, which gives privilege to one thing over the other, has led to environmental degradation. He observes that the same privilege given to men over women was given to human beings over the environment. Eventually stakeholders in Africa find it difficult to identify and control modern-day challenges posed by the neglect of the environment. In a continent where deep-rooted cultural and religious practices are rampant, they lead to widespread ignorance, which determines human conduct towards the environment. This has made it challenging to curtail environmental threats, much less overcome. It shows that the African culture's privilege of men over women and humans over the environment exacerbates and makes the environmental crisis intractable. For example, the challenging puzzle is why women in Africa are the ones to plant the trees and men are harvest them for to sell them. Both male and female are partakers of the God-given resources; equitably, they enjoy the environmental resources, and their activities should be geared towards sustained environmental conservation. He displayed bias on gender involvement in practical environmental conservation, whereas there was to be equity in involvement, which is a case of concern in this study.

According to Njeru (2016), Embu County faces many environmental challenges that affect the agricultural sector. These include soil acidification and soil alkalinity, loss of biodiversity, and soil erosion. These agricultural practices are essential to this study since they give a reality of environmental degradation. Frida (2017) asserts that agroforestry is an essential agricultural practice that contributes to environmental conservation and human livelihood. Both Fridah (2017) and Njeru (2016) concerned themselves with agriculture practices, but whereas Fridah (2017) pointed out effective ways of conserving the environment, Njeru (2016) left it at how man's involvement in

improving agriculture production left the environment in deplorable condition thus raising the concern on how to conserve the environment effectively.

Inspire Clean Energy (2021) calls for ways a man could help save the environment. The call is that man should do something about the environment instead of worrying. The hope is that man could remove the home carbon print. Protecting the environment is the foundation for sustaining our planet, community and autonomy. If the environment is not it is risky to human life, animals, plants, and soil. Protecting the environment could be done through everyday lifestyle through the small behaviours one adopts to protect planet Earth. The adopted behaviours are brought about by the awareness of why it is essential to take action. Preservation measures like reducing, reusing, and recycling are practiced through this awareness. Consumers should buy products from recycled materials, such as tissue paper. Instead of using the information as hard copies, consumers could use them as soft copies to communicate and store information. More lifestyle behaviour includes creating awareness on why we should conserve the environment and coordinating clean-ups that check how much waste goes to landfills. Practicing the use of renewable energy reduces harmful emissions into the atmosphere. The study concerned itself with congregants' practices to check environmental conservation.

#### **2.4 Ways to Improve Environmental Conservation**

Blake (1996:198) noted that a distinctive church contribution to contemporary environmental awareness arise from understanding human beings as part of nature. With such limits in mind, Pope John Paul II, in the Hundredth Year, argues that in addition to protecting natural ecosystems and other species, humanity should safeguard the proper use of the earth's resources intended for all. However, Blake (1996) does not mention how to improve the Conservation measures needed to safeguard the resources, which was a concern of this study.

NOAA (2021) embraced the conservation of the environment, starting with the individual. The oceanic service asserted the three Rs: reduce, reuse, and recycle to conserve the national resources, and land refill space. The emphasis was on volunteering for community clean up and furthering education, which enhances knowledge and understanding of the importance and value of our natural resources.,

conservation of water and not sending chemicals to waterways, planting trees, and shopping wisely to avoid plastics pollution. The concern in this study was how congregants could practically attain the three Rs as a step in improving environmental conservation.

One of the resources in the rural areas is water. Water needs to be conserved for use by the present and future generations. Poor resource management would deprive man of their valuable need. Prokopy (2005) opines that rural water supplies within the sub-Saharan Africa had indicated reduced sustainability, with the solution lying entirely on the adoption of a comprehensive approach in strategy and execution. Embu Evurore District is in a semi-arid region with few permanent streams. Water is a scarce commodity that needs careful attention to ensure it is conserved. Prokopy (2005) notes the reduced sustainability of water in sub-Saharan Africa but does not suggest ways to conserve water. This study sought to find ways to conserve water, as water as a resource is part of this environment.

Jerie (2010), in his case study on Bulawayo Catholic Archdiocese in Zimbabwe, notes that the Church had lived up to the scriptural expectation by observing the doctrine of making the earth habitable today and for future generations. This was through undertaking environmental conservation projects with a faith-based commitment and therefore giving the feeling of being responsible to God through the effort to conserve the environment. Jerie (2010) does not give the effectiveness of the project in environmental conservation, which could serve as a benchmark to the congregants of Embu-Evurore District. The practices of improving conservation raised concerns in this study.

Louis (1994) asserts that fire could be used to revitalize forests and, at the same time, keep communities safe from fire danger. To protect land and maintain friendly ecosystems, the Moore Foundation prescribes burning to restore forests, maintain clean water, and lower the risk of world fires. The fire is used to maintain healthy forests by deliberately setting fire to remove dense vegetation build-up in forests. The build-up of debris on forest floors fuels catastrophic world fires. This practice allows indigenous plants and wildlife to thrive, restoring diverse ecosystems. The practice uses fire to fight fire with the management of firefighting professionals. Louis (1994)

use of professionals in regenerating forests to improve the environment was a practice worth considering since their knowledge suggested an effort to conserve the environment effectively.

Ikiara and Nderitu (2014) assert that humans are part of the environment. Human surroundings include air, water, land, and all living things, which form the entire ecosystem. Ikiara and Nderitu (2014) agree with the WCC's affirmation of Peace and integrity of creation, which resists environmental degradation. However, the council affirmation did not give ways to improve measures of conserving the environment to uphold the integrity of God's creation, which raised a concern that prompted this study.

Getui (1993) argues that for any tangible results to be realized in a healthy environment, it is a concern for an individual and collective effort. Each individual Christian, singly and collectively has an essential role to play. As a center of awareness, churches have to educate their congregations on individual responsibilities towards the environment. The role of the church in environmental conservation is essential and demanding. Churches ought to have taught and expected their members to recognize and appreciate the providence of God. Destroying the environment is sin against the essential cosmic dimension of creation and redemption. The concern of this study was to establish whether tangible results to a healthy environment could be realized with the Church's involvement in improving environmental conservation practices.

Kathuri (2016) noted that agricultural production enhances environmental conservation since it leads to the development of agriculture that works with the natural cycles. Conventional challenges associated with conventional agriculture threaten environmental sustainability. The methods used in agriculture to enhance conservation are a vital concern for this study as it sought ways to improve environmental conservation practices.

Bennett (2017) sees earth resources as gifts from God, intended for everyone's benefit. Christians have a reason, duty, and responsibility to care for and conserve the environment. They are stewards and trustees, not mere consumers and users. He

argues that land is a precious resource that the present generation has inherited. Land must be preserved for future generations. He further points how care for these natural resources measures our stewardship and respect for the creator. This study sought to determine the measures the Church has taken to improve environmental conservation as their reason, duty, and responsibility, as mentioned by Bennett (2017).

Christopher (2023) observes that Faith leaders from around the world came together and, in one accord, published a letter to the Cop 27 summit of world leaders. The letter called for an end to new fossil projects. This study is concerned with the effectiveness of environmental conservation and the fact that fossil fuels are part of air pollutants. The study concerned ways in which the congregants conserve the atmosphere.

Hessel (1996) emphasized that the environmental crisis required a significant rethinking of the relationship of humans to the earth. Religious and philosophical attitudes would also be crucial to rethinking the future of human-earth relationships. It required broader philosophical and religious understandings of us as creatures of nature, embedded in these life cycles and dependent on these ecosystems. The Church has an integral contribution to protect and care for the environment. Church should strive for a healthy co-existence between humanity and the natural environment for mutual benefit. By conserving and protecting natural resources, the Church will have contributed immensely towards a healthy and wealthy society. The Church needs to face the reality of the issues of conserving the environment. She should mobilize people to work together for common goals, be they healthful environments or other aspects of environmental planning, and this forms a significant concern in this study.

Lodge (2006) notes that religion has much to offer to modern environmentalism. Christianity has the potential to contribute to a renewed environmental ethics. Lodge (2006) believes that ecologists and Christians work together to conserve the environment, but he does not suggest how it could be done, raising concerns in this study.

Okolo (2019) recommends careful in use of environmental resources to reduce the rate of environmental degradation prevalent in society today. However, Okolo (2019)

does not explicitly show how to use conservation measures to improve the environment, making it necessary for this study to find out how environmental conservation measures could be improve.

Reddy (2020) suggests that the youth could be part of the solution rather than the problem. She observed that humans have embraced the path of self-destruction, destroying the homes that have sheltered them through carbon emissions, deforestation, land degradation, and anthropogenic activities. She noted that those activities harm our ecosystem and environmental biodiversity. She opined that while significant changes were only possible if countries and corporations altered their policy and actions, individuals had the potential to make a difference either through small actions or more significant initiatives. She urges the youth to be part of the solution, not a part of the problem. She identifies some of the inclusivity activities as volunteering to work with environmental organizations, starting her initiatives on environmental conservation, reducing pollution by buying wisely through the use of recycled packaging, for example, bottled water, and separating the waste into plastics, metals, a paper which can be sold for recycling and biodegradable materials should be put separately. Reddy (2020) is aware of the glaring environmental degradation and offers possible ways to reduce the pollution of the environment. This study sought to find out how the congregants in FGCK Embu Evurore District practiced measures of environmental conservation to improve their environment.

## **2.5 Theoretical Framework**

Environmental conservation attracts a great deal of enthusiasm from scholars worldwide who contemplate it from alternate points of view. This study was based on the Behaviour Change Theory by Skinner (1938). The theory postulates that individuals are victims of society, and external behavioural controls determine their behaviour. As one interacts with society, one learns to respond in a particular way as influenced by the environment. The theory is relevant to the current study because it explains the rationale of the teachings of the FGCK in addressing environmental conservation in the Embu Evurore District. The environment, therefore, motivates, reinforces, and encourages behaviour. The congregants of the Full Gospel Churches of Kenya Embu Evurore are influenced by environmental conservation teachings, which motivate them to practice environmental conservation. This theory guided the

current study in examining how the teachings on environmental conservation to the congregants in Embu Evurore District influenced their environmental conservation practices.

Kintunde (2017) expounds on the theories and concepts of human behaviour in environmental conservation and notes that if people are better informed, they will become more aware of environmental problems and consequently will be motivated to behave in an environmentally responsible manner. He linked knowledge to attitude and then behaviour attitude.

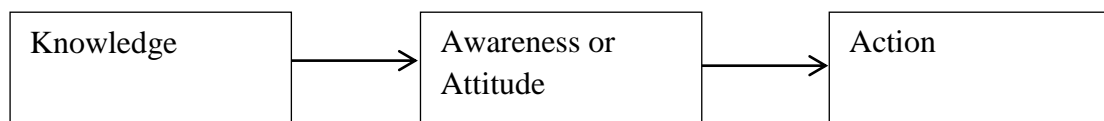


Figure 1: Behaviour Change Model

If the leaders relay information to the congregants and the congregants are informed of environment conservation measures, they, in turn, would have the chance to behave responsibly to conserve the environment. Therefore, they would use conservation methods to improve the environment. The study sought to determine to what level disseminated knowledge by the leaders had influenced the congregants in improving their environment conservation methods.

Ajzen (1991) focuses on the theory of behaviour change in the reasoned action model. The model suggests that a person's behaviour is informed by their intention. This intention was, in turn, a function of their attitude towards the behaviour and subjective norms expected of the people. The subjective norms capitalize on what other people expect from a person. It also involved normative beliefs about what other people expected me to do. Behaviour also involves motivation- how important is it for me to do what others expect me to do? The theory, therefore, aims at creating a new attitude with a belief, strength, and evaluation that supports their persuasive goal. The congregants in Embu Evurore District would have their attitude towards environment conservation changed. Through reasoned behaviour, they would see the need to practice environmental conservation as expected by the leaders and other congregants. The results would be an earnest search for measures to improve the environment in Embu Evurore District.

Christopher (2023) notes that religion significantly and positively influences people's behaviour. Spiritual practices and liturgies are developed to help believers integrate environmental concerns with their spirituality. He references Ruth Valerion's writ on Archbishop of Canterbury's book on lent. A point of great concern is that environmental issues should be presented from a theological perspective. The focus is on the challenges that face environmental conservation, such as scarcity of water, air pollution, land degradation, loss of biodiversity, and energy wastage. Eventually, people will feel more connected to the natural world and believe that they should take care of the world, especially by saving energy, recycling materials, and choosing natural foods. Christopher (2023) notes that people's exposure to liturgies leads to a change of attitude, eventually influencing their behaviour. In the behaviour change theory, their religious teachings should inform the congregant's environmental conservation practices in Embu Evurore District.

The behaviour change theory has been used in public health. The aim is to promote quality of life by creating environmental conditions for good health. Success is achieved at the community level. Health precautions lead to good health (Joanne & Rebecca, 2010).

## **CHAPTER THREE**

### **RESEARCH METHODS**

#### **3.1 Location of the Study**

The study covered the Embu Evurore District of the Full Gospel Churches of Kenya. It is one of the districts in Mount Kenya, a South region of the Full Gospel Churches of Kenya. Embu Evurore District encompasses five local church assemblies, namely: Kanyuambora Local Church Assembly, which is made up of four branches; Ishiara Local Church Assembly, which is made up of three branches; Kanthoki Local Church Assembly, which is made up of four branches; Kamumu Local Church Assembly which was made up of six branches and Gitii Local Church Assembly which is made up of four branches. Generally, the congregants in this district settled in a semi-arid environment endowed with fertile soils, scrub and bush vegetation, and woodlands.

Two large rivers provide water, River Thuci and River Ena, and some minor tributaries drain the region. The region is arable; other than sedentary pastoralism, people cultivate crops like maize, beans, cassava, sorghum, millet, mangoes, tomatoes, cotton, and sisal. Dairy and beef farming, agriculture, tourism, transport, and trade are major economic activities in this region. Charcoal is a significant source of fuel income for most residents of the Embu-Evurore District. Due to tree cover loss, soil is exposed to erosion agents (Kawira & Otzelberger, 2017). This study was suitable for this area because the environment has suffered degradation due to human activities. Streams have turned into dry valleys, and rainfall and whirlwinds intensely erode the soil, leading to imminent drought conditions that threaten human life. Land fragmentation and the tree felling have contributed to aridity in this area.

#### **3.2 Research Design**

The study adopted a descriptive research design. This scientific method involves describing a subject without manipulating it (Ngechu, 2004). The design was chosen because, through it, the study collected and analysed data as it existed in the field without manipulating any variables. According to Kerlinger (1986), a descriptive survey involves a systematic inquiry in cases where the researcher has no direct control over the dependent variables. The teachings of environmental conservation practices by the Full Gospel Churches of Kenya in Embu Evurore District formed the

independent variable. The researcher could not manipulate them, while environment conservation practices formed the dependent variable. The study, therefore, gave an idea of the existing state of the environment in Embu Evurore District.

A descriptive research design also allowed the researcher to generate both numerical and descriptive data. Thus, the researcher considered the design appropriate for this study because it involved fact-finding and inquiries from the leaders and congregants about the teachings and practices of the Full Gospel Churches of Kenya on environment conservation in Embu Evurore District and reporting the findings without manipulating the variables.

### **3.3 Target Population**

The research was carried out after clearance by the Chuka University Institutional Ethics Committee. After obtaining Research Licence by NACOST, the researcher obtained research authorisation from the Embu county commissioner. Permission to visit the congregants in various branches was granted by the presiding Bishop of FGCK Embu Evurore District. The research study was conducted in all the Full Gospel churches in Embu Evurore District. The respondents of the study were drawn from twenty-one branches comprising of leaders and congregants (Table 1).

Table 1

Target Population in FGCK Embu Evurore District

LCA	Branch	Congregants
Kanyuambora	Kanyuambora	280
	Kavengero	83
	Ganganga	78
	Kavuru	65
Gitii	Gitii	150
	Karigiri	85
	Kanyangi	83
	Kirie	70
Ishiara	Ishiara	248
	Kianjeru	55
	Ciangerera	41
Kamumu	Kamumu	145
	Milimani	80
	Magaca	62
	Gacianthukuri	66
	Ivutuka	54
	Kavairi	58
	Kanthoki	120
Kanthoki	Kieramba	92
	Kamunthigo	68
	Ciangerera	41
	Total	2032

Source (FGCK attendance Records at District Level, December 2023)

### 3.4 Sampling Procedure and Sample Size

The study used Random sampling to obtain the desired sample for the study and get a representative of the whole. The technique was used to sample leaders as well as the congregants. Kothari (2004) argues that under random sampling, the study chooses particular units to constitute a sample because the sample is representative of the whole. According to Kathuri and Pals (2004), a sample of 327 represents a population of 2200, Appendix XII. According to Israel (2013), any target population of more than 50,000 is considered indefinite, and the sample size was calculated using the formula.

$$No = \frac{z^2(p_i - p)}{e^2}$$

Where  $n$  was the sample for finite population size,

$z$  was the abscissa of the normal curve for a given confidence interval (1.96) for 95% ,

$p$  was the estimated fraction of the population with a given attribute usually 0.5, and  $e$

was the confidence interval expressed as a decimal (0.05)

$$no = \frac{1.96^2(0.5)0.5}{0.0025} = 385$$

For finite population (<50,000) the sample size was calculated using the sample size for infinite population and the finite population size using the formula;

$$n = \frac{no}{1 + \frac{(no - 1)}{n}}$$

Where n was the population size and *n* was the required (finite) sample size.

$$n = \frac{385}{1 + \frac{(385-1)}{n}}$$

$$= 323.66$$

The sample representing people will occur in whole numbers, thus making a total of 324. Thus, in this study, the sample consisted of 324 congregants using the above formulae. The respondents included the congregants of the 21 branches in the five local churches. To determine the sample size for leaders, sampling by percentage was used. According to Kothari (2004), between 20 % and 50 % was used. Hence, 50% of the leaders were interviewed to allow inclusivity. That was 50 % of 5 equals 2.5. Since people form discrete data, they would occur as whole numbers, and so after rounding off, they were three. Since the leaders were congregation members in five local churches, the sample size was three leaders and 324 congregants to get a total sample size of 327. This concurred with Kathuri and Pals's (2004) table for determining sample size from a given population; a population of 2000 had a sample of 322, while a population of 2200 had a Sample of 327. Since the population was 2032, Appendix XII. A sample of 327 was picked for broader inclusivity. The table below summarizes the sample size for the study in the Embu Evurore District of the Full Gospel churches of Kenya.

Table 2

Sample Size in Embu Evurore District

Sample	Criteria by	Total
Congregants	Israel	324
Leaders	Kothari 2004	3
Total Sample	324+3	327

Since leaders were part of the congregation, the Sample was 324 congregants and three leaders and it formed a total sample of 327. To get the representative data from each branch cluster random sampling was used.

Table 3

Sample Size from Every Branch

LCA	Branch	Population	Sample
Kanyuambora	Kanyuambora	280	45
	Kavengero	83	13
	Ganganga	78	12
	Kavuru	65	10
Gitii	Gitii	150	25
	Karigiri	85	14
	Kyangi	83	13
	Kirie	70	11
Ishiara	Kirie	70	11
	Ishiara	248	40
	Kianjeru	59	9
	Ciangeru	41	7
Kamumu	Kamumu	145	23
	Milimani	80	13
	Magaca	62	10
	Gacianthunkuri	66	11
	Ivutuka	54	9
	Kavairi	58	9
Kanthoki	Kanthoki	120	19
	Kieramba	92	14
	Kogari	55	9
	Kamunthigo	68	11
		2032	327

Cluster random sampling technique was used to select representative samples from every branch. Simple random sampling was used to give the individual congregants to participate in filling the questionnaires. Individuals were chosen randomly and not more than once to prevent partiality that would negatively affect the validity of the study results. This technique was relevant because it provided equal opportunities for respondents from every branch to be randomly selected, and the sampling method was free from preconceptions and unfairness. Three leaders were purposively selected from three branches for an interview scheduled to gather detailed information that was of interest in this study. The observation was done in three local churches out of five. This is 50 % of the local churches. Fisher (1983) agrees that where there is no

estimate available for the proportion, the target population is assumed to have characteristics of the interest, and therefore 50 % was used.

### **3.5 Research Instruments**

The study used questionnaires and interview schedules as the primary research instruments in the data collection process. The observation tool was used to assess the influence of the teachings and practices of environment conservation. The survey questionnaires were utilized for information gathering since they offered significant points of interest in the data collection, introduced vast quantities of individuals, and finished the examination with a single amassing of information. Gay and Airasian (2003) affirm that questionnaires allow respondents to express their views and opinions. They are essential in eliciting responses on the influence of the teachings of the Full Gospel Churches of Kenya in environmental conservation in the Embu Evurore district. The questionnaires were designed for church members, while the interview schedules were designed for the leaders who were well-versed in disseminating information on environmental conservation. An observation tool was used to draw evidence on the effectiveness of environmental conservation. According to Harris (2010), more than one data collection technique enhances the credibility and trustworthiness of research findings. The researcher used all these tools to assess the extent to which the congregants and their effectiveness have applied the teachings and practices of environmental conservation.

#### **3.5.1 Questionnaires for Congregants**

The research questionnaires for congregants were administered to 324 congregants of Full Gospel Churches of Kenya in Embu Evurore District. Each questionnaire was partitioned into two sections, which aimed to collect variables on the influence of the teachings and practices on environmental conservation in Embu Evurore District. Section A captured demographic information. Section B summarized the findings on church teachings on environmental conservation, practices on environmental conservation, effectiveness of environmental conservation practices, and ways to improve environmental conservation. Both open-ended and closed items were administered. According to Kothari and Garg (2004), questionnaires give respondents enough time to give well-thought-out answers and are less expensive to administer since some were sent to distant people.

### **3.5.2 Interview Schedule for Church Leaders**

The research interview schedules were administered to three leaders in the Embu Evurore District. The interview guide for the leaders contained brief questions covering all the objectives of the research study. According to Kombo and Tromp (2006), an interview guide provides the researcher with in-depth information about cases of interest. The researcher conducted a face-to-face oral interview with two leaders. Due to the geographical location at the time of the interview, a cell phone interview was carried out with the third interviewee.

### **3.6.3 Observation Schedule**

During the visit to the selected areas, the researcher observed the practices and the measures undertaken by the congregants in environmental conservation. The researcher also observed the effectiveness of the practices in environmental conservation in the study area. This enabled the researcher to compare and contrast the data gathered from other sources. The purpose of personal observation was to obtain additional and collaborative data, which enhanced the data gathered through other data collection methods. Personal observation enabled the researcher to note practices and measures on environmental conservation by the Embu Evurore District congregants.

### **3.6 Data Collection Procedure**

Kothari (2004) affirms that data collection involves steps and activities vital for conducting research effectively. The researcher obtained approval to conduct the research study and an introductory letter from Chuka University to accompany the research instruments to the research field. The researcher also sought authority from the National Commission for Science and Technology (NACOSTI). Before distributing the questionnaires to the congregants, permission was sought from the relevant authorities, including local authorities at Embu Evurore District of the Full Gospel Churches of Kenya. The researcher then wrote letters to the pastors seeking permission to carry out the research in the areas served by their churches. Once permission was granted, the researcher visited some of the jurisdictions of the sampled Full Gospel Churches to administer the questionnaires to the congregants. The researcher also sent some questionnaires to respondents through the church pastors. The researcher stored the collected data for analysis. Data was further

obtained from secondary sources. This includes books, dissertation and thesis, internet, and conference papers. Library research was done at Chuka University, University of Embu, Nairobi University, and Kenyatta University library.

### **3.7 Data Analysis Techniques**

Cohen and Marion (1994) state that data auditing should be done after data gathering to eliminate mistakes. As Keith (2009) indicated, data analysis is discovering significance from data. The researcher checked the questionnaires for completeness and the exactness of the respondents' answers. Data editing was done to examine the information pieces, distinguish those wrongly reacted to, spelling mistakes, reduplication, segment division, and any clear spaces left unfilled by the respondents.

Data collected from the questionnaires was scored, coded, and analysed. Coding was done for the structured items. From the questionnaires and document analysis, qualitative data was analysed through Thematic Content Analysis. Descriptive statistics such as frequencies were computed to determine the patterns and trends of the variables under study. Data analysis used Statistical Package for Social Sciences (SPSS) version 20. The study's findings were presented in tables, charts, and graphs. The connection and linkages between the independent variables were examined, and the results were obtained.

### **3.8 Ethical Considerations**

The Researcher sought permission to conduct the study from the National Commission of Science, Technology and Innovation (NACOSTI), Appendix VIII after obtaining approval letter from Chuka University Institutional Ethics Review Committee, Appendix VII. Ethical issues relate to the privacy of possible and actual participants, including the voluntary nature of participants, the right to withdraw wholly or partially from the process, consent, possible deception of participants, and maintaining the confidentiality of data provided by individuals or identifiable participants and their anonymity (Batiste, 2016). Mugenda and Mugenda (2011) ascertain ethical considerations as essential, and any study has to take care of them to ensure high-quality results and protect the integrity of the researcher and the respondent.

Research study is inherently intrusive, and data obtained can be easily abused. Several principles guided the researcher; no harm was allowed to the respondents/participants due to their participation in the research. The respondent's right to privacy was respected and not exposed to undue pressure. Respondents were provided with sufficient initial information about the survey to enable them to give informed decision concerning participation and use of data. The researcher maintained confidentiality by using the data gathered for exclusive academic purposes, as promised to the respondents.

**CHAPTER FOUR**  
**ENVIRONMENTAL PRACTICES ADOPTED BY CONGREGANTS IN**  
**EMBU EVURORE DISTRICT, KENYA**

**4.1 The Response Rate**

The study intended to collect data from the Full Gospel Churches of Kenya Embu Evurore District, Kenya. In this survey, the response rate is the percentage of the congregants who filled in the questionnaires and the leaders who participated in the interviews. According to Creswell (2008), the response rate is arrived at by expressing the number of respondents (r) as a percentage of the total sample (R).  $r/R * 100$ . Out of a sample of 327 respondents, feedback was received from 291 respondents. The response rate was  $291/327*100 = 88.99\%$ . Cooper and Schindler (2014) opine that a response rate of 50% is satisfactory, 60% is better, and 70% is excellent. As such, the response rate for this study was excellent because it was above 80%, as indicated in the Table 4.

Table 4

Response Rate

Instruments	Respondents	Response frequency	Response rate Percentage
Questionnaires	324	288	88.89 %
Interview tool	3	3	100 %
Total	327	291	88.99 %

The tabulation above depicts an excellent total response of 88.99 percent. The congregants' response was excellent at 88.89 percent while the leaders were at 100 percent.

**4.2 Socio–Demographic Characteristics of the Respondents**

This refers to the background characteristics of the respondents sampled in the study. The details were collected and analysed using percentages as well as graphs.

**4.2.1 Age of the Respondents**

The age of the respondent was important so as to determine if it affected the respondent's participation in conservation of the environment in Evurore District, Embu County. Adults are custodians of tenured land, a reason why the lowest age limit was capped at twenty years.

Table 5

Age of the Respondents

Age Bracket(Years)	Frequency	Percentage
20 – 30	81	27.8%
31 -40	57	19.6%
41 -50	71	24.4 %
Above 50	82	28.2%
Total	291	100%

From the study, most congregants were between the ages of twenty and thirty and above fifty. The age group with the least respondents was between thirty-one and fifty years old. It was evident that since this is a rural area, most middle-aged people were not in the rural area because they were working in urban areas.

**4.2.2 Respondents' Academic Qualifications**

Academic qualification was directly related to the level of exposure to a person and his ability to seek new information to be knowledgeable. The findings of the study were tabulated in Table 6.

Table 6

Respondents Academic Qualifications

Academic level	Frequency	Percentage
Certificate and below	203	69.8%
Diploma	41	14.1%
Bachelor's Degree	34	11.7%
Master's Degree	12	4.1%
Ph.D.	1	0.3%

The analysis indicated that the highest percentage were those with a Certificate of Education and below at 69.8%, approximately 70%. The results also showed that 14.1 % approximated to 14% had a Diploma level, 11.7% approximated to 12% had an undergraduate degree, and 4.1% approximated to 12% had a Master's degree. Only 0.3% had a Doctor of Philosophy Degree, which was found to be very low and could be estimated to be zero. The level of education could influence the knowledge of environmental conservation and, therefore, environmental practices. Those with high academic credentials were few, and this could influence the awareness levels of congregants

### 4.2.3: Respondents Length of Stay in their Current Churches

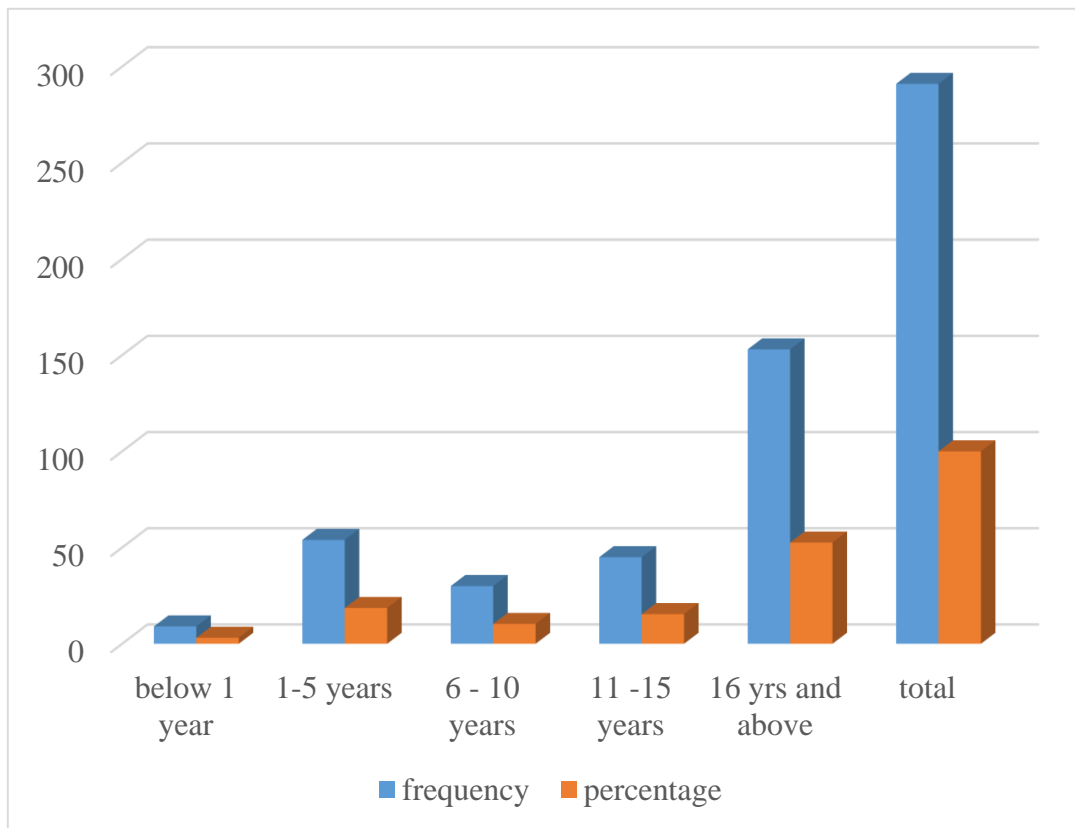
The study obtained information on the congregants' length of stay in their current church. The responses obtained are presented in Table 7.

Table 7

Respondents Length of Stay in their Current Churches

Length of stay	Frequency	Percentage
Below one year	9	3.1%
1-5 yrs	54	18.6%
6-10 yrs	30	10.3%
11-15 yrs	45	15.4%
16 yrs and above	153	52.6%
Total	291	100%

The study indicated that most congregants had stayed in their church for 16 years and above (52.6%). Significantly, few congregants were new in their churches with less than a year's stay (3.1%). Those who had stayed in their churches for one to five years were 18.6 percent, six to ten years 10.3 percent, and eleven to fifteen years 15.4 percent. The percentages are represented by the bar graph below. The length of stay in the church could influence the congregants' awareness of environmental practices and, eventually, their environmental practices.



**Figure 2:** Respondents Length of Stay in their Current Church

#### **4.2.4 Respondents’ Church in Embu Evurore District**

The following study findings indicated that the respondents belonged to different local churches in Embu Evurore District. The population of the church congregants could influence the vastness of the conservation area because the more the congregants practicing environmental conservation, the greater the area of the conserved environment.

Table 8

#### Respondents Church Location

Assembly	Frequency	Percent
Kanyuambora	78	26.8%
Ishiara	67	23.0%
Gitii	52	17.9%
Kamumu	60	20.6%
Kanthoki	34	11.7%
Total	291	100%

The survey found that Kanyuambora L.C.A had the highest percentage of respondents (26.8%), while Kanthoki had the least (11.7%). Ishihara L.C.A had 23% of respondents, Gitii had 17.9%, and Kamumu had 20.6%.

The population in the given local churches could influence environmental conservation since the more they are, the wider the area covered by conservation practices. The fewer the congregants, the lesser the area covered by conservation practices.

#### **4.2.5 Status of Respondents Church**

The church's status was either a church, the headquarters of the Local Church Assembly, or a branch, the smallest unit of congregants in the FGCK Assembly. The headquarters of the local churches are located in urban areas or market centres, while the branches are in rural setups. The church is located in a different environment. The study sought to find out the practices of environmental conservation in the respondent's church.

Table 9

Status of Respondents' Church

Church Status	Frequency	Percentage
Branch	165	56.7
L.C.A	126	43.3
Total	291	100%

The survey found that most respondents were from the branch level (56.7%), while those from the local churches were the least (43.3%). The L.C.A. is mainly located within market centres or towns, while the branches are in rural areas. The church's location influenced environmental conservation practices because the nature of degradation in urban areas differs from that in rural areas.

#### **4.3 Environmental Practices Adopted by Congregants in Embu Evurore District**

Environmental conservation is a way of exercising dominion over creation, as taught in Genesis 2:15, where human beings are called upon to preserve nature. Nginda (2023) observes that the church should inspire and empower individuals and communities to safeguard Africa's natural heritage through environmental

conservation. Nginda (2023) notes that by emphasizing the connection between faith and the environment, the church could instil a reverence for nature, encouraging its members to adopt sustainable environmental conservation practices in their daily lives. The study sought to determine whether the congregants had the idea of environmental conservation. Kintunde (2017) noted that if people were informed about better methods of environmental conservation, it would influence their attitude, which would then determine their participation in environmental conservation. The sections that follow give the results of the environmental practices. The study first sought to assess the awareness of the teachings and the practices and how adequate the practices were.

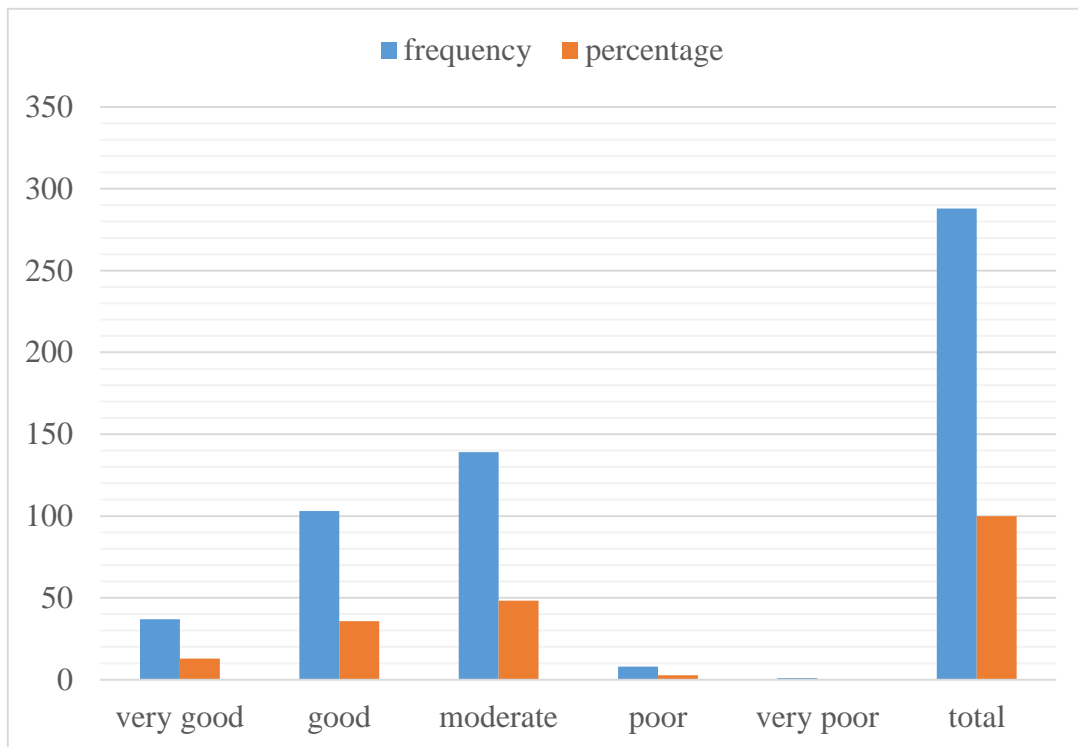
#### **4.3.1 The Congregants Awareness of Environmental Conservation Measures**

Information was sought on the congregants' awareness of environmental conservation measures. The responses obtained are presented on Table 10 and Figure 3.

Table 10

##### Congregants' awareness of Environmental Conservation Measures

Awareness	Frequency	Percentage
Very Good	37	12.9%
Good	103	35.8%
Moderate	139	48.3%
Poor	8	2.7%
Very Poor	1	0.3%



**Figure 3:** Congregants Awareness of Environmental Conservation Measures

The study found that environmental awareness was shared amongst the congregants. 12.9% of the congregants were rated as very good in having the information on environmental conservation, 35.8 % of the congregants were rated as being good in information, 48% were moderately informed, 30% of the congregants were challenged in information where 2.7% were poorly informed, and 8% were very poorly informed. The study shows that the poorly informed and the very poorly informed stood little chance of participating in environmental conservation. Since knowledge is power, it is unlikely that they could have the power to conserve the environment when they lack the knowledge of practices to conserve the environment.

#### **4.3.2 Congregants Awareness of Biblical Teachings on Environmental Conservation**

Most congregants could cite Biblical teachings that are catalysts for environmental conservation as a way of obeying God's statutes. The Bible verses mostly cited include Genesis chapter 2:15, in which God commanded man to take care of the garden of Aden. Psalm 24:1, where the psalmist cites the earth as belonging to God, so Christians are just caretakers. Matthew 14:20, where after Jesus fed the five thousand, He commanded his disciples to have all leftovers collected. This helped

keep the environment clean and avoided the wastage of God's given resources. Deuteronomy 23:25, a hungry person can pluck the heads of their neighbour's standing corn to satisfy their hunger, but they should not use a sickle to cut these stalks. This would be destructive as it would not allow the corn to regenerate in the following season, making corn stalks lose any further use to man as human food. (Munyua, 2024), noted that it is sound to teach Christians about environmental conservation so that they can put it into practice. He noted that one could not practice what they were unaware of. This is evidenced in Appendix XIII, Figure 22.

#### 4.3.2 Congregants Awareness of Biblical Teachings on Environmental Conservation

The study sought information on the biblical teachings as understood by the congregants. Their responses are presented on Table 11.

Table 11

Congregants' Awareness of Biblical Teachings on Environmental Conservation

Awareness	Frequency	Percentage
Yes	239	82.9%
No	49	17.1%
Total	288	100%

Figure 4 below shows the comparison in percentages between congregants' awareness of the Biblical teachings on environmental conservation.

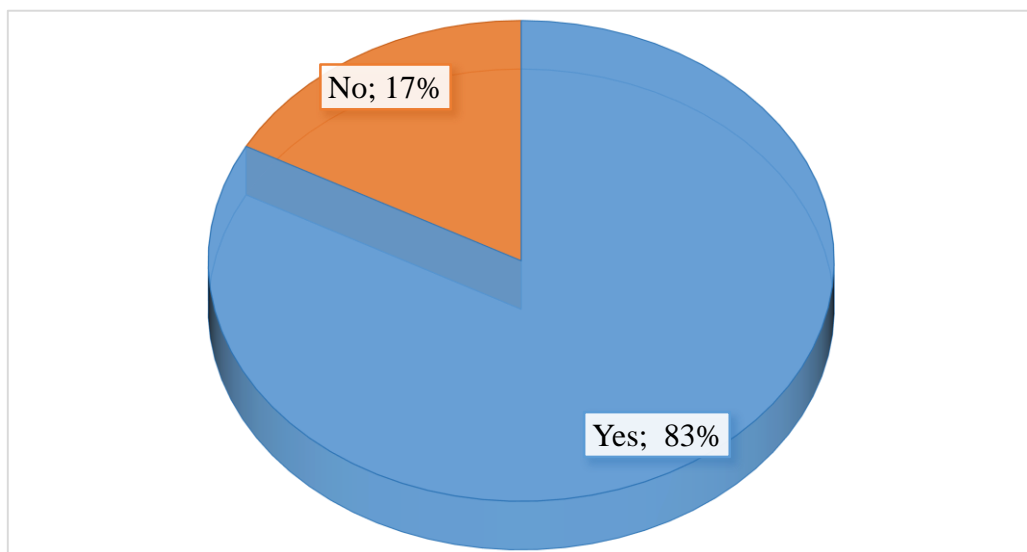


Figure 4: Congregants' Awareness of Biblical Teachings on Environmental Conservation

### 4.3.3 Congregants' Awareness of Importance of the Teachings on Environmental Conservation

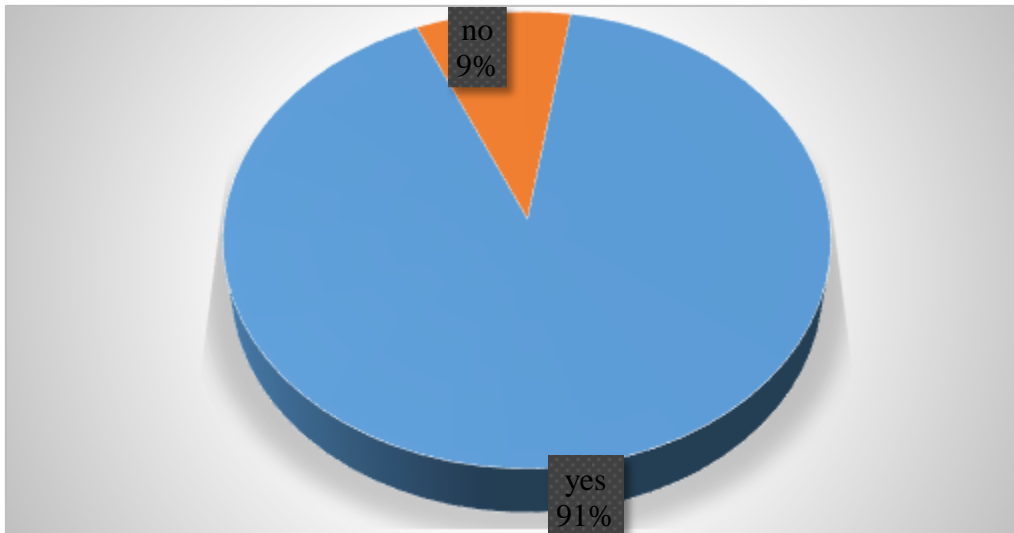
Gottlieb (1996) notes that God is the creator, and humans are God's creatures who have been called to care for, cultivate, and preserve God's work. The Church has the role of imparting knowledge on authentic development support for the efficient use of environmental resources. It inspires clean energy attested to awareness of the need to protect the environment (Hinze, 1996). They concur that our everyday lifestyle should form the foundation for environmental conservation. Environmental conservation is directly related to the awareness of the preservation of the environment. Therefore, there was a need to make congregants knowledgeable on methods of conserving the environment. Mukamure (2013) observed that the environmental crisis was a fundamentally moral and religious issue, informing this study of the need to make congregants aware of the need to conserve the environment.

The study established that most congregants recognized the importance of being made aware of the need to conserve the environment. Two hundred sixty congregants, or 91%, recognized this, while 28 of them, or 9% of the respondents, did not attest to this awareness.

Table 12

#### Congregants' Awareness on the Importance of the Teachings on Environmental Conservation.

Awareness of importance of the teachings	Frequency	Percentage
Yes	260	91%
No	28	9%
Total	288	100%



**Figure 5:** Congregants Awareness of the Importance of the Teachings on Environmental Conservation

The study findings show that 91% of congregants are aware of the FGCK teachings on environmental conservation, which shows that the church had a great impact on them. Most of the congregants cited this importance: it made them aware of the methods to use in conserving the environment, and they realized the need to plant trees to benefit humanity now and for future generations. Environment conservation is a bank to guarantee good health in that conserved soils will lead to good crop production, which will provide food security. The air environment is cleansed of some pollutants like carbon dioxide by the presence of luxurious trees. A green environment is an excellent sight to behold, adding to the aesthetic value of the environment. The congregants are aware of better farming methods, which include harvesting water surface runoff into pans around the stems of fruit trees. Land carrying capacity for livestock helps control soil erosion. Clearing bushes and collecting litter leads to a clean environment free from vermin like mosquitoes, which are health hazards and can result in death. Mature trees were cited as of paramount importance due to their much-needed shade due to the scorching sun on very sunny days. A photograph showing congregants sheltering themselves from the scorching sun in Appendix XIII.

#### **4.3.4 Ways in which the Church influences Congregants' Knowledge on Environmental Conservation**

The study findings indicated that the church had influenced the congregants' response to environmental practices in various ways. This is opined by (Gichira, 2019), who notes that the clergy teaches the congregants how to use God-given resources and the environment to enhance their livelihood. The study findings from 260 (91%) indicate that congregants practiced environmental conservation using various methods. As stated below, 28 (9%) of the congregants did not relate their practices as influenced by the church. The areas mentioned as having influenced congregants' knowledge in order of frequency were sensitizing on proper disposal of waste at 104, on suitable farming methods 96, participating in seminars 43, exposure to government policy on protection of the environment 12, training of leaders 5. Dispersal of published material to congregants was not mentioned.

Table 13

Church Influence on Congregants' Knowledge of Conservation Measures

Influence	Frequency	cumulative
Proper waste disposal	104	104
Suitable farming methods	96	200
Seminars	43	243
Government policy exposure	12	255
Training of leaders	5	260
Total	260	260

The study found that the church informed most congregants about environmental conservation. Makanga (2024 OI) noted that leaders followed up on the congregants during health education sessions and that when the congregants were healthy, they would participate with vigour in environmental conservation measures.

#### **4.3.5 Ways the Church Participates in Environment Conservation**

Reddy (2020) pointed out that the initiative to conserve the environment is an individual and corporate responsibility. Whereas the Full Gospel Churches of Kenya have initiated the environmental conservation process, it is the work of individual congregants to practice environmental conservation. The study found that the church participated in environment conservation practices in the order of the methods mentioned below and in the order of their frequencies and percentages.

Table 14

Church Participation in Environmental Conservation

Method of participation	Frequency	Percentage
Tree planting	122	48.4%
Proper ways of cultivation	81	32.1%
Proper waste disposal	39	15.5%
Constructing good drainage system	10	4.0 %

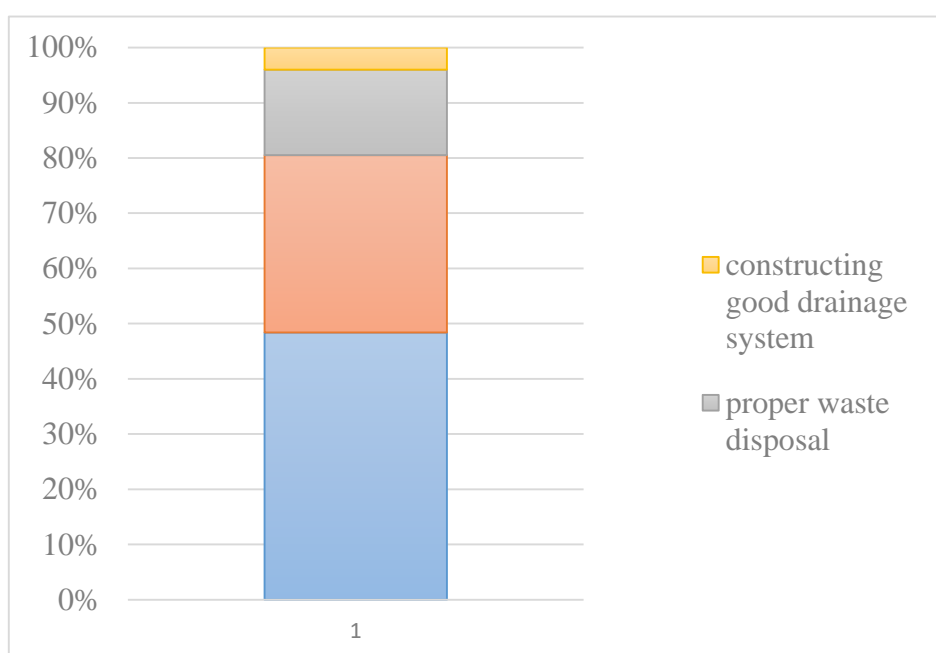


Figure 6: Church Participation in Environmental Conservation

The study captured positive responses on church participation in environmental conservation from 252 respondents, 90.6%. Thirty-six respondents, 9.4%, either had a negative response or had left the response blank. The study captured the following ways of participation in order of how common they were in practice. Tree planting was most familiar with 122 (48.4 %). Proper cultivation methods were at 81 (32.1%). Proper waste disposal was mentioned by 39 congregants, constituting 15.5% of the total. The construction of sound drainage systems had ten responses, constituting 4% of the total. The study indicated that 9.4 % of 36 respondents had not participated in environmental conservation. The main reason for being unaware of the church's participation in environmental conservation was the short stay in the local churches they belonged to. Others cited primary reasons as needing to be better informed. Some members noted that they needed more leadership. The study conclusion is that most congregants in Embu Evurore District practice environmental conservation

methods. The study was conducted by Munyua (2024 OI). Some of the activities congregants undertook to conserve the environment were damming soil where galleys existed and farming in God's way. Some congregants planted seedlings that they could use to replant their farms and sell remainders to those who sought them. Reusing empty milk sachets was evidence of environmental conservation since the empty sachets would end up as land or water pollutants. (Appendix XIII, figure 13). Some congregants abandoned free-range pasturing of livestock and started controlling livestock keeping, such as zero grazing. Some reared goats indoors, as evidenced in Appendix XIII, figure 15.

#### **4.3.6 Concern on Environmental Conservation in Embu Evurore District**

We are all stewards accountable for how we use things entrusted to us to care for (Akolo, 2019). This study sought to determine if the congregants were concerned with the area's environmental conservation state. The study found that all the congregants were concerned about the prevailing environmental degradation in Embu Evurore District. They cited the methods that can be used to conserve the environment as Tree planting, proper waste disposal, good farming practices, protecting water catchment areas, checking on livestock population, and the land carrying capacity, where some of them have turned to zero grazing with goats kept in pens. Some respondents cultivate their nurseries to provide seedlings, as evidenced in Appendix XIII, figure 14. This is evidence of skills well internalized and being put into practice. The seedlings were planted and watered during the dry season to be ready for transplanting during the wet season.

#### **4.3.7 Frequency of Sensitisation on the Environmental Conservation**

The study sought to determine how often the congregants were sensitized to environmental conservation. It found that 4.2 % (12) attested to frequent sensitization, 31.3% (90) to having often sensitized, 54.1% (156) as having sensitization rarely done, and 10.4% (30) had not participated in any sensitization session.

Table 15

Sensitisation on Environmental Conservation

Sensitisation	Frequency	Percentage
More often	12	4.2%
Often	90	31.2%
Rarely	156	54.1%
Not at all	30	10.4%
Total	288	100 %

This study found that the degree of sensitization influenced the congregants’ active role in environmental conservation. The degree of sensitization influenced the congregants’ cognition on conservation methods, with some unaware of how their activities negatively impact the environment, for example, tree felling for charcoal burning. Some congregants lacked the seriousness of practicing environmental conservation measures, especially proper farming methods. Farming along river banks was also cited as a practice that caused erosion and siltation of river beds, resulting in floods during heavy rains. Congregants who often participated in environmental conservation sensitization were aware of the methods of environmental conservation practices and were well equipped with environmental conservation measures. The congregants willingly planted trees and practiced proper farming methods.

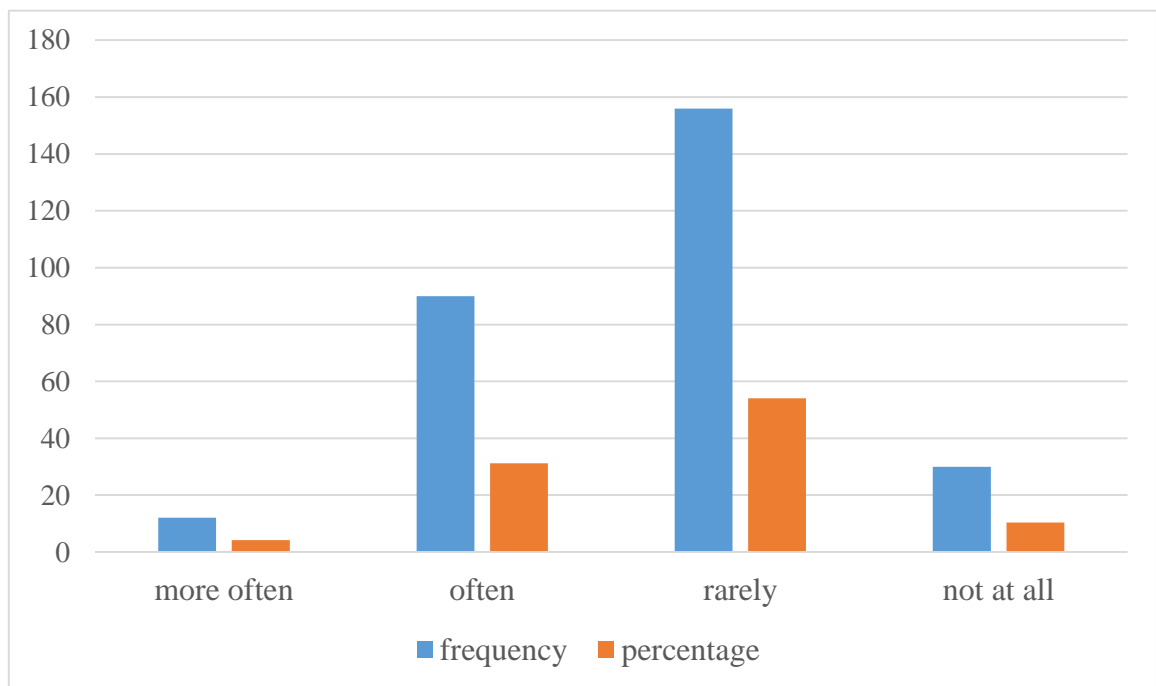


Figure 7: Sensitisation Frequency on Environmental Conservation

The interview tool informed the study and revealed that congregants used various environmental conservation methods in the Embu Evurore District. All agreed that tree planting was a method used in environmental conservation. The congregants practiced terracing to control soil erosion. All the interviewees agreed that seminars were used to disseminate knowledge on environmental conservation. Munyua (2024, OI) highlights farming in God's way as one of the methods used in conserving the environment in the Embu Evurore District. The method involves minimal tillage, early planting, early weeding, mulching, water pans at the tree stems, and water trenches to trap water during the rainy season. Nguru (2024, OI) cites community health empowerment as one of the significant ways that the congregants in Embu Evurore District received information on environmental conservation. Public place clean-ups, as evidenced in Appendix XIII Figure 22, and table banking, as evidenced in Appendix XIII Figure 21, empowered the congregants economically, making them meet financial obligations and equipping congregants to meet the challenges encountered during environmental conservation practices.

The observation tool informed the study of how congregants use mulching to conserve moisture, control soil erosion, and control weeds. The study also informed us of how congregants meet at table banks to build a financial base for conservation practices like drawing water to irrigate seedlings during drought. Table banking also helped the members buy seedlings. Table banking is where members in organized groups pull their funds together and give them to one member in a cyclic manner to boost the financial base for their support.

#### **4.3.8 Congregants' Activeness in Conservation of the Environment**

The study sought to find out the congregant's activeness in environmental conservation. Howard (2017) contends that human economic activities influence the future of the earth's community due to overgrazed land, poor waste disposal, and poor farming methods. Muhia and Gathogo (2018) observed that degradation of the environment dates back to the colonial era, aggravated soil erosion and siltation of rivers, not to mention the loss of flora and fauna as human beings encroach on forests and other natural vegetation. The study found the participation of environmental conservation and the frequency of environmental conservation as tabulated below.

Table 16

Congregants' Activeness on Environmental Conservation

Participation	Frequency	Percentage
Very active	23	8
Active	219	76
Not Active	46	16
Total	288	100

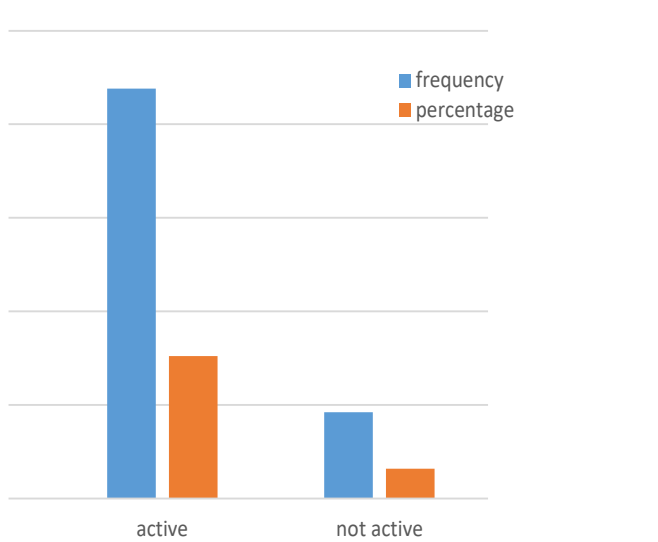


Figure 8: Congregants' Activeness in Environmental Conservation

The study found that most congregants are active in environmental conservation (76%). The study found that there were congregants who were not active in environmental conservation, forming 16 %, while 8% were found to be very active. Those who were active were found to practice suitable farming methods like mulching, terraces, and stone ridges, as evidenced in Appendix XIII where there was planting of trees, draining stagnant water, and digging terns and water pans to collect water. Others planted sisal plants to control soil erosion and keep their compounds clean. They avoided the burning of plant remains; they instead used them to build ridges that controlled soil erosion. In the long run, humus forms on farms.

**4.4 Conclusion**

The study, therefore, concluded that most of the congregants in Embu Evurore District practiced environmental conservation measures (92.014%). The study found that minority congregants (7.986%) did not practice environmental conservation. The study found that not all congregants were aware of environmental conservation

practices. The awareness of the congregants on environmental conservation measures was through knowledge passed to congregants by leaders. It, therefore, was a significant factor that influenced how the congregants participated in conserving the environment. The study concluded that knowledge disseminated by leaders on measures to conserve the environment influenced their environmental conservation methods.

## CHAPTER FIVE

### EFFECTIVENESS OF ENVIRONMENTAL CONSERVATION PRACTICES IN THE FULL GOSPEL CHURCHES OF KENYA IN EMBU EVUORE DISTRICT, KENYA

#### 5.1 Introduction

This chapter discusses the effectiveness of environmental conservation practices in the Full Gospel Churches of Kenya in Embu Evurore District. The discussion was based on data received from responses in the questionnaires administered, oral interviews, and observations made during the research study. Behaviour change theory (Skinner, 1938), states that individuals are victims of society and that their external physical controls influence their behaviour in this study. The effectiveness of environment conservation is a result of the behaviour of the congregants. The behaviour of the congregants was influenced by their awareness, which was influenced by the church's teachings. The study's findings on the effectiveness of the church teachings and practices are evaluated below.

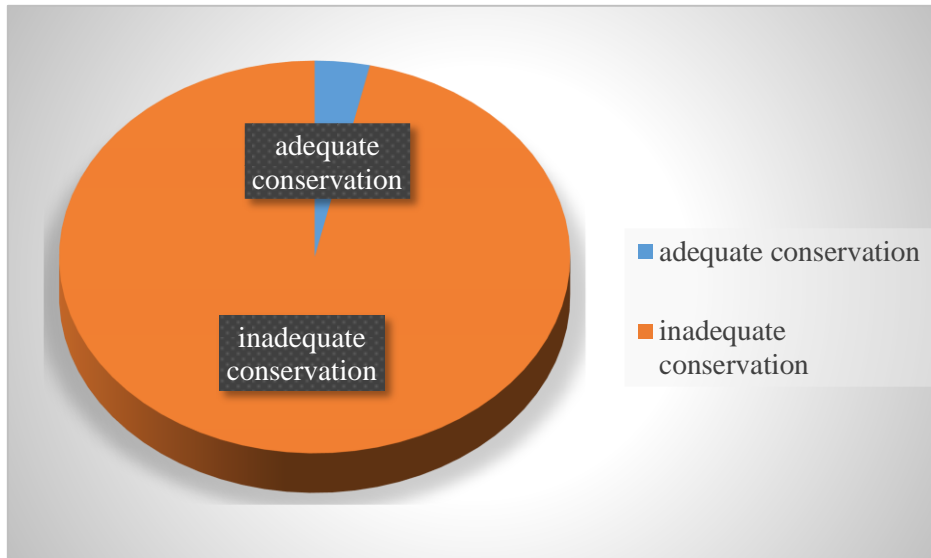
#### 5.2 Adequacy of Environmental Conservation in Embu Evurore District

The study sought to determine whether environmental conservation practice in the Embu Evurore District was adequate. Gottlieb (1996) notes how humans have long used air, land, and water as sinks to dispose of all the waste they generate. He notes that these disposal practices left most waste inadequately treated, causing pollution. Pollution is not only a threat to human life, but it is also an oppression of Mother Nature. The study elicited the responses of 3.5% (10), attesting that the environment conservation practices were effective. A great majority (96.5 %) of the respondents observed that the environment conservation practices were not adequate.

Table 17

#### Adequacy of Environmental Conservation

Adequacy of environmental conservation	Frequency	Percentages
Adequate conservation	10	3.5%
Inadequate conservation	278	96.5%
Total	288	100%



**Figure 9:** Adequacy of Environmental Conservation

The study sought to find out the recommended measures that could be undertaken to improve the conservation of the environment in the Embu Evurore District. The respondents, who observed that the environmental conservation was inadequate, variously recommended areas of improvement. The areas of improvement recommended include avoiding burning litter from the farms but instead using it as farm mulch, as indicated by the vegetable mulch Appendix XIII Figure 16. There was a need for more sensitization of the congregants on the methods of conserving the environment and the importance of conserving the environment; the church should have more leaders committed to reaching out to the congregants for follow-up on the conservation practices.

For effective environmental conservation to be realized, more finances were needed to manage environmental practices, especially tree seedling nurseries. There is a need to be more vigilant in garbage and litter collection. Ong’ong’a (1999) observes that an increase in population leads to resource depletion. The study suggested that congregants should embrace alternative energy sources instead of firewood and charcoal. If the congregants had to use firewood or charcoal, they were to consider using energy-saving stoves. Planting of trees along riverbanks and streams, such as the Thuchi and Ena rivers, was recommended. During the rainy season, the construction of cut-off drains was recommended. Observing the legislation on

environmental conservation as guided by NEMA was also recommended. Working with any like-minded organizations was also recommended.

### **5.3 Environment Practices that are a Challenge to Environmental Conservation**

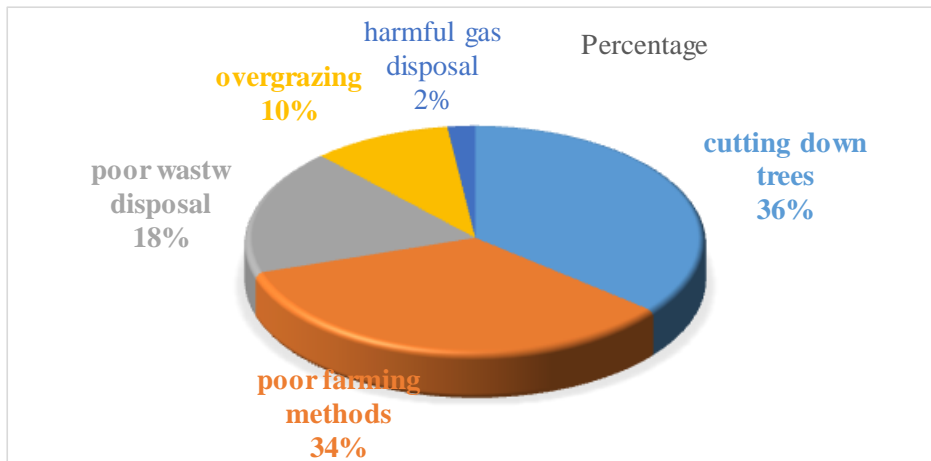
According to Kiarie (2020), human activities are a challenge to environmental conservation. He points out that poor farming practices caused soils to be friable and easily eroded. He notes that intense logging and encroaching of natural habitats cause environmental degradation. His observations were parallel to the findings of this study as they regarded the challenges that faced environmental conservation in Full Gospel Church of Kenya Embu Evurore District. The outstanding practices were poor farming practices, illegal logging, and encroachment of forests. The study found that congregants in the Full Gospel Church of Kenya Embu Evurore were aware that environmental conservation faced challenges, and some congregants in Embu Evurore District engaged in activities that caused environmental degradation. The study found that the following environmental challenges were faced in order of their frequency.

Table 18

#### Challenging Environmental Practices

Challenge	Frequency	Percentage
Cutting down trees	104	36%
Poor farming methods	98	34%
Poor waste disposal	52	18%
Overgrazing	28	10%
Harmful gas disposal	6	2%
Total	288	100%

The study found that the most common challenge to environmental conservation was cutting down trees, pegged at 104 (36%). Poor farming methods were at 98 (34%), Poor waste disposal was at 52 (18%), overgrazing was at 28 (10%), and harmful gas emissions were at 6 (2%). The study found that tree felling was common among the congregants in Embu Evurore District. These environmental practices have gone a long way in accounting for the poorly conserved environment in Embu Evurore District.



**Figure 10:** Challenging Environmental Practices

Rotich (2019) states that tree logging, charcoal burning, and overgrazing challenge environmental conservation. Wangiri (1999) noted that inappropriate agricultural practices destroy soils and pollute the air. Overgrazing and poor farming methods also contribute to environmental degradation. This affirms the findings of this study that tree felling, poor farming methods and overgrazing are significant ways in which the environment suffers degradation.

Makanga (2024, OI) noted more challenges to environmental conservation, such as inadequate water supply. He highlights that tree nurseries and newly planted trees eventually dry off during the dry season even after doing well during the rainy season. He noted that piped water was only available in some homesteads of congregants, and during the dry season, the piped water suffered rationing. He noted that the major rivers, Thuchi and Ena, are far apart, and donkey and ox-pulled carts supplied water from these rivers. These methods are expensive, thus limiting water consumption to household chores instead of irrigation. Munyua (2024, OI) informed the study that high poverty levels among the congregants were a challenge to environmental conservation. The reason cited was that tree felling for charcoal burning was done for the congregants to get the money needed to feed their needs.

#### **5.4 Importance of the Teachings and Practices of Environmental Conservation in Embu Evurore District**

In his reference to the Lent Book by the Archbishop of Canterbury in 2020, which was authored by Ruth Valerion (Christopher, 2023), he observed that looking at the problem of environmental conservation from a theological perspective was essential. He noted that it was necessary to take care of the world by noting the environmental challenges that faced environmental conservation. The lent book notes the influence of the congregants' beliefs and behaviour. They were positive towards energy conservation, food choices, and materials recycling. They positively deemed nature as sacred. This study found that it was important for congregants to be taught how to conserve the environment. This is through sensitisation seminars, Appendix XIII, Figure 20.

The study found that the awareness by the congregants helped in environmental conservation in various ways, as outlined below. The importance includes reduced tree felling for charcoal and firewood. The study found that planted trees provided animal feed and human food. The foliage from trees and dead decaying shrubs added humus to the soil. Planted trees hold soil intact against soil erosion. They also act as breakers of strong winds, thus controlling soil erosion and preventing damage to other crops, buildings, and structures. Trees help supply fresh air, reducing the spread of airborne diseases. Suitable farming methods like water trenches help retain soil moisture and erosion. Trenches helped conserve water for plants in their environs and checked soil erosion, as evidenced in Appendix XIII Figure 18. The management of drainage systems prevent waterborne disease. As shown in Appendix XIII Figure 19, trees have created an attractive environment and helped attract rainfall.

#### **5.5 Barriers that the Congregants Face in Environment Conservation**

The study found that the congregants face challenges while conserving the environment. Their challenges are constraints to their conservation practices that impede success in conserving the environment. The significant challenges faced are tabulated below in percentages.

Table 19

Barriers Faced by Congregants in Environment Conservation

Constraints	Frequency	Percentages
Inadequate finances	109	38 %
Lack of material resources for environmental conservation	88	31 %
Lack of awareness	39	13%
Lack of support by the local authority	32	11%
Inadequate support from communities	20	7%
Total	288	100%

The study found that the congregants faced factors that barred effective environmental conservation. In order of their effects, the challenges faced include inadequate finances 109 (38%) and lack of materials for environmental conservation 88 (31%). Some congregants needed more awareness of environmental conservation measures 39 (13%), while 32 (11%) indicated lack of support by local authority. The study found that the congregants faced inadequate support from the community 20 (7%).

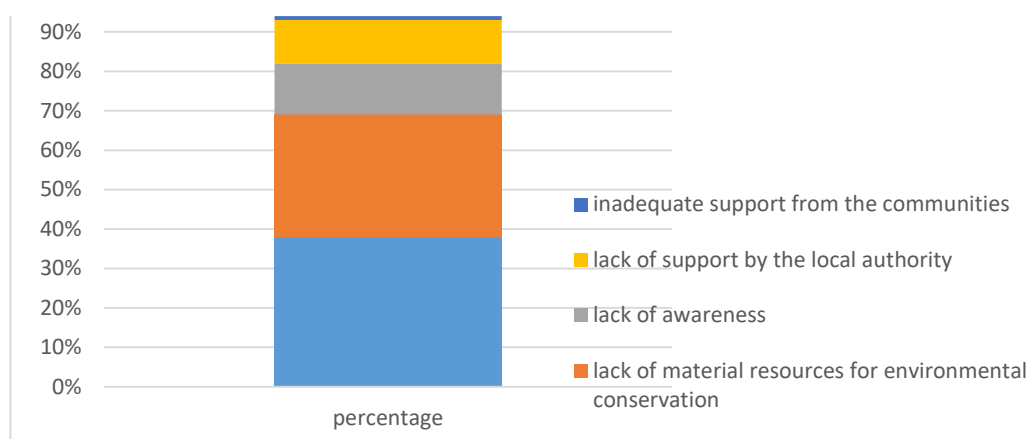


Figure 11: Barriers to effective Environmental Conservation

The study found that the congregants faced barriers which prevented them from conserving the environment adequately. Some needed to gain adequate environmental conservation knowledge, resulting in them carrying out activities like tree felling that destroyed the environment. Lack of support from the local community and local authority caused them to compromise their participation in practicing environment conservation practices just like other community members.

The study found that congregants planted their own tree nurseries to supply tree seedlings for their farms. They also joined table banking groups to finance expenses related to conserving the environment, such as making terraces.

### **5.6 Conclusion**

The study found that environmental conservation in Embu Evurore District was not adequate, with 96.5% noting that the prevailing condition was ailing and recommended measures to improve the environment. While the study found that there were practices to conserve the environment, it also established that the practices faced problems that, if addressed, would enhance environmental conservation.

**CHAPTER SIX**  
**WAYS TO IMPROVE ENVIRONMENTAL CONSERVATION PRACTICES**  
**IN THE FULL GOSPEL CHURCHES OF KENYA EMBU EVURORE**  
**DISTRICT, KENYA**

**6.1 Introduction**

Mathai (2010) saw the deep wounds of the earth in artificial environmental degradation. There was, therefore, a need to improve environmental conservation practices in Embu Evurore District. Howard (2017) contends that the degradation of the environment is not just an economic calamity but also an offense against God. There is a need to conserve the environment to heal the earth's deep wounds, which are an offense against God. The chapter examines ways to improve environmental conservation practices in Embu Evurore District. According to Skinner (1938), behaviour change theory influences the knowledge and skills of congregants, which in turn influences their environmental practices in conserving the environment. The congregants' practices geared to improving the environment would be informed by the congregants' awareness of measures they should practice to conserve the environment.

**6.2 Ways to Improve Environment Conservation in Embu Evurore District**

Prokopy (2005) noted the need to adopt a comprehensive approach in strategizing and executing an approach that would help conserve water to sustain it for future generations. Environmental conservation concerns all resources, including water. Other resources need to be conserved equally. This study sought to establish concern to improve environmental conservation in the Embu Evurore District.

Table 20

Congregants Concern on Effective Environmental Conservation

Nature of concern	Frequency	Percentage
Positive concern	258	89.5 %
No concern	30	10.5 %
Total	288	100%

Most congregants were concerned that the FGCK Embu-Evurore District environment needs effective environmental conservation 258 (89.5%). Some were uncertain of the effectiveness of environmental conservation in Embu-Evurore District 30

(10.5%). More sensitisation on conservation measures was a major concern for effective environmental conservation (Nguru, 2024, OI).

### 6.2.1 Conservation Measures Undertaken by the Congregants

The study found that the congregants are concerned about the effectiveness of environmental conservation in the Embu Evurore District. The study established the various ways the congregants cited to improve environmental practices, as enumerated below.

Table 21

Environmental Conservation Measures Practiced by the Congregants

Conservation measures	Frequency	Percentage
Tree Planting	103	36%
Training more leaders	50	17%
More Sensitisation Seminars	101	35%
Evaluation of achievements by leaders	32	12%
Total	288	100%

The study found that congregants can improve environmental conservation through continued tree planting and reduced tree felling. Makanga (2004, OI) suggested that more leaders should be trained and frequently meet with the congregants at given times of the year to disseminate information and evaluate achievements in environmental conservation.

### 6.2.2 Financial and Material Support

The study found that inadequate finances and materials derailed environmental conservation in the Full Gospel Churches of Kenya Embu Evurore District. Money is of the essence for the success of environmental conservation, both for administration and conservation practices, and therefore, there is a need for financial support. The study found that for effective environment conservation, the congregants need material support, such as the supply of tree seedlings and farm implements. Teamwork was found to be core, whether on a friendly basis or lending a hand for payment as congregants engaged in conservation practices. Appendix XIII Figure 13 and Figure 21 attests to some of the activities congregants were involved in for

financial stability and seedlings provision. Pooling up finances (Table Banking and Tree Nurseries) is taught by the Church leaders.

### **6.2.3 Proper Conservation Methods**

The study informed that the congregants must commit themselves to clearing the bushes and making cut-off rains to avoid floods in the homesteads and farms. The congregants should have well-planned and organized clean-ups in their residences, churches, and public places like markets, health facilities, and county administrative compounds. The study found that the congregants should practice proper disposal of biodegradable and non-biodegradable waste and waste with radioactive elements like cell phones and other electronic gadgets. The study found that proper cultivation methods and controlled livestock grazing can increase environmental conservation. Building gabions and propagating own seedlings in nurseries were cited as ways to improve environmental conservation, Appendix XIII, figure 14.

### **6.3 The Pivotal Role FGCK Embu Evurore District has Played in Environmental Conservation**

The willingness of any given community to maintain a project is related to the demand response, making the beneficiaries' procurement decisions and marshaling utilities crucial in supporting their decisions (Mulwa, 2010). The willingness of the congregants to improve the environment is influenced by the benefits of a healthy environment, like unpolluted air and checked soil erosion, among others. The study sought to determine whether the FGCK Embu Evurore District played a vital role in environmental conservation. The congregants elicited both a yes and no response.

The study found out that the role played by Embu Evurore District in environmental conservation is viewed differently, with both positive and negative affirmations: 238 (83%) attested to the church being instrumental to environmental conservation. In comparison, 50 (17%) indicated that the church was not instrumental to environmental conservation in Embu Evurore District.

Table 22

FGCK Embu Evurore District Pivotal Role in Environmental Conservation

Pivotal Role	Frequency	Percentage
Yes	238	83%
No	50	17%
Total	238	100%

The study found that Embu Evurore District was pivotal in environmental conservation in Embu Evurore District. The study established that it was an achievement for the church to propagate the idea of environmental conservation and to pass knowledge on environmental conservation to the congregants. The Full Gospel Churches of Kenya participated in seedling distribution to the farmers. Congregants had participated in clean-up exercises as communal work, for example, as cited at Kamumu and Kanyuambora Markets. The congregants had participated in farm demonstrations on how to farm God’s way by maintaining soil fertility. The Full Gospel Churches of Kenya encouraged the congregants to participate in National Tree Planting Day as in Labour Day on the 31st of May. The use of compost pits to dispose of litter was encouraged. The study found that the congregants were encouraged to sell metal waste to scrap metal dealers who moved about the villages, as were the waste plastic materials.

The study also found that Full Gospel Churches of Kenya Embu Evurore District had failed to play the pivotal role of environmental conservation in that there was no follow-up on how they progressed in conserving the environment. The frequency of seminars on environmental conservation had gone down. Most congregants with short stays in the Full Gospel Churches of Kenya had scanty information on environmental conservation. The study found that the financial allocation of money to enhance environmental conservation was not the priority regarding church annual budgets.

**6.4 Ways FGCK Embu Evurore District can be Supported to Successfully Conserve the Environment**

Ajzen (1991) explains Skinner's theory of behaviour change and notes that a person's intention to perform the behaviour is determined by their intentions; their intention is a function of their attitude. Through exposure to methods of conserving the

environment, the congregants' intention to practice the methods of conserving the environment was informed by their attitude towards environmental conservation.

#### **6.4.1 Congregants Positive Attitude to Environmental Conservation**

Since 83% of the congregants agreed that FGCK Embu Evurore District played a pivotal role in environmental conservation, the study concluded that their practice of environmental conservation was due to their positive attitude acquired after sensitization.

#### **6.4.2 Financial Support**

The study found that for successful environmental conservation, financial support is needed to cater to administrative activities by leaders and fund material support needed in environmental conservation. Nguru (2024, OI) observed that congregants teamed under his watch to carry out table banking to raise funds to meet their needs. One of the cited needs was to have funds to manage own tree nurseries. The tree seedlings were later planted on their farms, and the surplus was sold to community members. Fundraisers could be organized to source money. Table banking can be used to boost individuals' finances to meet costs in environmental conservation. The study also found a need to teach congregants the importance of trees, embrace tree planting, and preserve them, Appendix XIII, figure 19.

#### **6.4.3 Structure of the Department of Environmental Conservation**

The study found out that for the success of environmental conservation in the Full Gospel Churches of Kenya Embu Evurore District to be realized, there was a need for an elaborate structure of a department of environmental conservation. The structure should be defined to cascade from the Bishop's Office to the Reverend's Office and then the Pastor's Office, Nguru (2024, OI). The conservation practices need frequent evaluation, Makanga (2024, OI). The study found that some branches in the local churches did not put weight on environmental conservation, deeming it secular, having no spiritual touch to their faith.

#### **6.4.4 Collaboration of the Church with the Government and Non-government Organisations**

Nginda (2023) observed that the church can inspire by integrating environmental consciousness into its teachings, advocating for policy changes, promoting sustainable practices, and supporting community-led initiatives. The church can inspire and empower individuals and communities. The study found that the Full Gospel Churches of Kenya need to collaborate with Government organizations and non-government organizations who work to see successful environmental conservation. The congregants can be provided with waste bins to enhance proper waste disposal. (Munyua, 2024 OI). The study found that congregants should be encouraged to do communal work towards conserving the environment, Appendix XIII, figure 22, especially at the public utilities, and that protective gear gets donors for a steady supply according to need (Makanga, 2024, OI).

#### **6.5 Conclusion**

The study found that Embu Evurore District was vital in environmental conservation (83%). However, conservation practices need improvement. Improvement can be achieved by strengthening environmental conservation measures and supporting the congregants mainly through finances and material support. This enables the congregants to engage in practices geared to improving the environment and ensures they are informed on the measures they should practice to conserve the environment.

## **CHAPTER SEVEN**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **7.1 Summary**

This section presents a summary of the findings of the three objectives of this study. The objectives of this study, as stated in chapter two of this thesis, are to find out ways the congregants practice the teachings on environmental conservation in FGCK Embu Evurore District, to establish the effectiveness of environmental conservation measures practiced in Embu Evurore District, to establish ways to improve practices in environmental conservation in FGCK Embu Evurore District.

The research conducted established the following;

The study's objective one was to find ways the congregants practice the teachings on environmental conservation in Embu Evurore District. The researcher found that the majority of the congregants were aware of environmental conservation practices and that they practiced environmental conservation in the Embu Evurore District. The researcher also found that there were minority congregants who were not sensitized to environmental conservation measures.

The second objective of this study was to examine the effectiveness of the environmental conservation measures practiced in FGCK Embu Evurore District. The researcher found that the adequacy of environmental conservation was 96.5%, while ineffective environmental conservation was 3.5%. The researcher also found out that the main challenge of environmental conservation was the cutting down of trees without replacing them (36%) and poor methods of cultivation and livestock rearing (34%). The researcher found out that congregants faced various challenges in environmental conservation. The primary constraints were inadequate finances (38%) and insufficient materials for use (31%), both adding up to 69%. The congregants agreed that the environment conservation measures were not 100% effective in conserving the environment in FGCK Embu Evurore District.

The third objective of this study was to establish ways to improve practices on environmental conservation in FGCK Embu Evurore District. The researcher found out that all the congregants (100%) were concerned that the conservation of the

environment in FGCK Embu Evurore District needed to be improved. The researcher established the significant areas that needed improvement, such as conserving trees through reduced tree felling and planting more trees. Support fund for environmental conservation was crucial to enhance practices that helped in environmental conservation. The researcher found that seminars and workshops should be frequently held to sensitize the congregants on ways to enhance environmental conservation. The research found that congregants needed constant reminder of the measures to improve environmental conservation.

The study found that the Church played a pivotal role in environmental conservation, with 83% of congregants attesting to this. However, 17% of the congregants opined that the Church did not play a pivotal role in environmental conservation, citing insufficient funds, rare seminars, and poor follow-up of the congregants by leaders in their environmental practices. The study also found that the Church needed support from various financial provisions, frequent workshops, and an elaborate strategic plan mapped out for all local churches from the district level.

## **7.2 Conclusion**

After analysing the research findings, the study concluded that the church teachings influenced the congregants' practices on environmental conservation. The awareness of ways to conserve the environment equipped the congregants with knowledge of methods of environment conservation. The research also concluded that the methods on environment conservation practiced by congregants led to environment conservation in FGCK Embu Evurore District. The research findings also led to the conclusion that the environmental conservation methods practiced by the congregants can be improved to make environment conservation more successful.

The analysis of the findings concluded that some congregants needed to be made aware of environmental conservation methods and. The study also concluded that FGCK Embu Evurore District needs financial and material support to succeed in environmental conservation.

### **7.3 Recommendations**

The following recommendations from the research study

- i) The study recommends that Church leaders in the FGCK and other religious denominations develop elaborate policies guiding their church's environmental conservation programs.
- ii) Religious organizations should plan on how to source finances to support environmental conservation.
- iii) Religious organisations should partner with the local authorities to enhance environmental conservation

### **7.4 Suggestion for Further Study**

- i) Further study can be done on Effective management of environmental resources for a better future
- ii) A further study can be done on Church support of the Government's effort to conserve the environment
- iii) Further study can be done on Christian response to mitigate climate change.

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**APPENDIX 1**  
**LETTER OF INTRODUCTION**

**ESTHER KARUANA**  
**RUBIRI**  
**P.O BOX 105 ISHIARA**  
**18th June 2024**

**TO WHOM IT MAY CONCERN**

**Dear Sir/ Madam,**

**RE: REQUEST FOR PARTICIPATION IN A RESEARCH STUDY**

I am a final year student at the Chuka University and in partial fulfilment of the requirement for the Award of the Degree of Master of Arts in Religious Studies, I am conducting a research study on *‘influence of the Teachings and Practices of The Full Gospel Churches of Kenya on Environmental Conservation in Embu Evurore District, Kenya.’* Your church has been selected as one of the churches to participate in his study. This study targets the leaders and congregants as the respondents to provide important information of research interest. Kindly consider this letter as a humble request to participate in this research. I therefore kindly ask for your assistance in collecting information by completing the questionnaire hereby attached. I will be grateful if you allow me to involve you and your congregants in this study. Your views will be considered important to this research survey. Participation in this research survey is voluntary and the information provided will be treated with utmost confidentiality and will only be used for the purpose of this survey. Please do not write your name anywhere on the questionnaire and give as honest answers as possible. The findings of the study shall be availed to you upon request.

Your assistance and co-operation will be highly appreciated. Thank you in advance

Yours faithfully,

Esther Karuana Rubiri

*Master Student in Religious Studies*  
Chuka University

**APPENDIX II**  
**CONGREGANTS' QUESTIONNAIRE**

The questionnaire is designed to collect data on *'Influence of the Teachings and Practices of the Full Gospel Churches of Kenya on Environmental conservation in Embu Evurore District, Kenya.'* It is divided into two sections: **Section A** which aim at collecting data on the demographic variables and **Section B** which aims at collecting data on the teachings and effectiveness of the Full Gospel Churches of Kenya on environmental conservation in Embu Evurore District. Do not write your name to ensure complete confidentiality. Please respond to all the questions. Tick (√) where applicable or write the answer in the provided space(s).

**Section A: Demographic variables.**

Put a tick (√) in the spaces provided.

1. Please tick against the gender  
(a) Male [ ]                      (b) Female [ ]
2. What is your age bracket?  
(a) 20-30 years [ ] (b) 31-40 years [ ] (c) 41-50 years [ ] (d) Above 50 years [ ]
3. What is your highest academic qualification?  
(a) Certificate and below [ ] (b) Diploma [ ] (c) Degree [ ] (d) Masters [ ]  
(e) PhD [ ]
4. How long have you been in this church as a member?  
(a) Less than 1 year [ ] (b) 1-5 years [ ] (c) 6-10 years [ ] (d) 11- 15 years [ ]  
(b) d) 16 years and above [ ]
5. Kindly indicate the location of your church in the following local church assemblies  
(a) Kanyuambora [ ] (b) Ishiara [ ] (c) Gitii [ ] (d) Kamumu [ ] (e) Kanthoki [ ]
6. Kindly indicate the status of your church.  
(a) Branch [ ] (b) LCA main church [ ]

**Section B: Teaching and Practices of Environmental Conservation by the Full Gospel Church of Kenya in Embu Evurore District.**

7. How would you classify the state of environment conservation in Embu Evurore District (Tick only one option?)

- (a) Very Good [ ]
- (b) Good [ ]
- (c) Moderate [ ]
- (d) Poor [ ]
- (e) Very poor [ ]

8. (i) Do you know any biblical teachings about caring and conserving of the environment?

- (a) Yes [ ] (b) No [ ]

(ii) If Yes in 8 (i) above, what does it teach on environmental conservation?

.....  
.....

9. (i) Are you aware of the importance of Christian teachings on environmental conservation in your church?

- (a) Yes [ ] (b) No [ ]

(ii) If Yes in 9 (i) above, kindly state some of the importance of the teaching on environmental conservation?

.....  
.....

10. (i) Does your Church influence congregants knowledge concerning the issues on environmental conservation?

- (a) Yes [ ] (b) No [ ]

(ii) If yes in 10 (i) above, kindly state in which ways? (Tick only one option).

- (a) Training leaders 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 [ ]
- (f) Educating on suitable farming methods [ ]

**Practices of Church Teachings on Environmental Conservation**

11 (i) Since you became a member of this church has the church taken any activity/ initiative specifically on conservation of environment?

(a) Yes [ ] (b) No [ ]

(ii) If Yes in 11 (i) above, kindly indicate in which ways? (Tick one option)

- (a) Planting trees [ ]
- (b) Waste disposal [ ]
- (c) Constructing good drainage systems [ ]
- (d) Proper ways of cultivation [ ]
- (e) Teaching on environment conservation measures [ ]
- (f) Any others specify.....

(iii) If no in 11 (i) above, what are the possible reasons that make your church not to participate in conservation practices of the environment?

.....  
.....

12.(i) Should congregants be concerned about the state of environmental conservation in the area?

(a)Yes [ ] (b) No [ ]

(ii) If Yes in 12 (i) above, how can they practice environment conservation?

.....

13. (i) How often have you been sensitised on environmental conservation issues ?

- (a) More often [ ]
- (b) Often [ ]
- (c) Rarely [ ]
- (d) Not at all [ ]

(ii) How has the information stated in 13 (i) above influenced congregant's role on environmental conservation? Kindly explain.

.....  
.....

14. (i) How active are the congregants on matters concerning conservation of the environment ? (Tick one option)

- a. Very active [ ]
- b. Active [ ]
- c. Not active [ ]

(ii) How does the activeness of the church stated in 14(i) above influence the environmental conservation practices? Kindly explain.

.....  
.....

**Effectiveness of Environmental Conservation Practices**

15. (i) In your own opinion, do you think Embu Evurore participation in environmental conservation practices is adequate?

(a) Yes [ ] (b) No [ ]

(ii) If no in 15 (i) above, what would you recommend be improved or considered to improve on the conservation of the environment by the church

.....  
.....

16.(i) Are you aware of environmental practices among congregants that are a challenge to conservation of the environment in Embu Evurore District?

(a) Yes [ ] (b) No [ ]

(ii) If Yes in 16 (i) above, which are some of the practices? (Tick only one option)

- (a) Poor farming methods [ ]
- (b) Cutting down of trees [ ]
- (c) Poor waste disposal [ ]
- (d) Overgrazing [ ]
- (e) Harmful gas emission [ ]

17 ( i) Is the existing environment conservation practice within the FGCK important?

(a) Yes [ ] (b) No [ ]

(ii) If Yes in 17 (i) above, kindly mention some of the importance;

.....  
.....

18. (i) Are their constraints faced by the congregants during environmental conservation in Embu Evurore District ?

(a) Yes [ ] (b) No [ ]

(ii) If yes in 18 (i) above, which challenges are those among the following options?

(Tick only one option)

(a) Inadequate finances [ ]

- (b) Lack of material resources for environmental conservation [ ]
- (c) Inadequate support from the community [ ]
- (d) Lack of awareness on practices by congregants [ ]
- (e) Lack of support by the local authority on environmental conservation [ ]

(iii) In reference to 18 (ii) above, how does it influence how the church conducts environmental conservation in Embu Evurore District? Kindly explain.

.....

.....

(iv) How do congregants manage the problem stated above as far as environmental conservation is concerned?

.....

.....

**Ways to improve environment conservation**

19.(i) Should congregants be concerned about the effectiveness of environmental conservation in your area?

- (a) Yes [ ] (b) No [ ]

(ii) I Yes in 11 (i) above, how can they improve environment conservation?

.....

.....

.....

20 (i) In your opinion, has FGCK Embu Evurore District played a pivotal role in the conservation of the environment?

- (a) Yes [ ] (b) No [ ]

(ii) Kindly explain your answer.

.....

.....

21. In your opinion, how can Embu Evurore District be strengthened/ supported to successfully conserve the environment in Embu Evurore District?

.....

.....

*Thank you for your time, co-operation and assistance*

**APPENDIX III**  
**INTERVIEW TOOL FOR LEADERS**

Interview Introduction

This interview is designed to collect data on *‘Influence of the Teachings and Practices of The Full Gospel Church of Kenya on environment conservation in Embu Evurore District, Kenya.*

Interview introduction:

I am a student of Masters of Arts Religious studies at Chuka University. Participation is voluntary. Your participation will immensely be appreciated. Your answers remain confidential,

1. What are the measures of environment conservation in Embu Evurore District? Kindly state them.

.....  
.....  
.....

2. As a leader, what steps have you taken to address the conservation of the environment? Kindly explain.

.....  
.....

3. As a leader do you think the teachings on environment conservation have influenced the congregants on environmental conservation? Kindly explain.

.....  
.....

4. In your opinion do you think church involvement in environment conservation in Embu Evurore District has improved the environment? Kindly explain.

.....  
.....

5. How can the project of environmental conservation within in Embu Evurore District be improved to enhance environment conservation? Briefly explain.

6. What other support can be given to the congregants in Embu Evurore District in order to make them more effective in enhancing conservation of the environment? Kindly explain.

.....  
.....

7. In your opinion, what do you think the congregants should do to enhance effective environmental conservation? Kindly explain.

.....  
.....  
.....

8. Mention any challenges you are aware of in effectively conserving the environment by the congregants in Embu Evurore District.

.....  
.....  
.....

*Thank you for your co-operation and assistance.*

*Do you have any questions for me?*

**APPENDIX IV**  
**OBSERVATION SCHEDULE**

**S/NO** \_\_\_\_\_ **LOCAL CHURCH** \_\_\_\_\_

**A. OBSERVED ENVIRONMENTAL CONSERVATION MEASURES**

- |   |     |
|---|-----|
| Note the Methods used                           | [ ] |
| 1. Tree planting.                               | [ ] |
| 2. Proper waste disposal.                       | [ ] |
| 3. Controlled livestock land carrying capacity. | [ ] |
| 4. Good farming methods.                        | [ ] |
| 5. Proper drainage methods.                     | [ ] |
| 6. Protected water catchment areas.             | [ ] |

**B. LEVEL OF EFFECTIVENESS ON ENVIRONMENT CONSERVATION**

1. Controlled soil erosion.
2. Vegetation cover'
3. Soil water conservation.
4. Food production.
5. Others {specify}



**APPENDIX VI**  
**LETTER FROM GRADUATE SCHOOL**



Knowledge is Wealth (*Sapientia divitia est*) Akili ni Mali  
**OFFICE OF THE DIRECTOR**  
**BOARD OF POSTGRADUATE STUDIES**

Telephones: 020-2310512/18  
Direct Line: 020-268 7625

postgraduate@chuka.ac.ke

P. O. Box 109-60400, Chuka  
Website: www.chuka.ac.ke

REF: AM16/29013/16

3<sup>rd</sup> June, 2024

**Director**  
**National Commission for Science Technology and Innovation**  
**Off Waiyaki Way, Upper Kabete**  
**P O Box 30623, 00100**  
**Nairobi.**

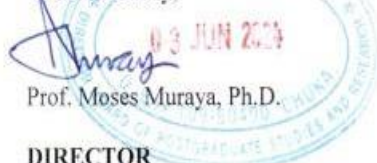
Dear Sir / Madam,

**ESTHER KARUANA RUBIRI**

The above-named person is a *bona fide* student of Chuka University pursuing MA in Religious Studies proposal titled: **Influence of the Teachings and Practices of the Full Gospel Churches of Kenya on Enviromental Conservation in Embu Evuvori District, Kenya.**

Ms.Karuana has defended at the Faculty level and is now expected to conduct research. Any assistance accorded will be highly appreciated.

Yours sincerely,



Prof. Moses Muraya, Ph.D.

**DIRECTOR**  
**BOARD OF POSTGRADUATE STUDIES**

**APPENDIX VII**  
**CHUKA UNIVERSITY INSTITUTIONAL ETHICS REVIEW COMMITTEE**  
**APPROVAL LETTER**



**CHUKA UNIVERSITY INSTITUTIONAL ETHICS REVIEW COMMITTEE**

Telephones: 020-2310512/18

P. O. Box 109-60400, Chuka

Direct Line: 0772894438

Email: [info@chuka.ac.ke](mailto:info@chuka.ac.ke)

Website: [www.chuka.ac.ke](http://www.chuka.ac.ke)

**8<sup>th</sup> May, 2024**

**REF: CUIERC/NACOSTI/514**

**TO: Esther Karuana Rubiri**

**RE: Influence of the Teachings and Practices of the Full Gospel Churches of Kenya on Environmental Conservation in Embu Evurore District, Kenya**

This is to inform you that *Chuka University IERC* has reviewed and approved your above research proposal. Your application approval number is *NACOSTI/NBC/AC-0812*. The approval period is 8<sup>th</sup> May, 2024 – 8<sup>th</sup> May, 2025.

This approval is subject to compliance with the following requirements;

- i. Only approved documents including (informed consents, study instruments, MTA) will be used
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by *Chuka University IERC*.
- iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to *Chuka University IERC* within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to *Chuka University IERC* within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to *Chuka University IERC*.




Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://oris.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely



**Dr. Benjamin Kanga**  
**SECRETARY**

**APPENDIX VIII**  
**NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND**  
**INNOVATION RESEARCH LICENCE**

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 554314	Date of Issue: 18/June/2024
<b>RESEARCH LICENSE</b>	
	
<p>This is to Certify that Ms. ESTHER KARUANA KARUANA of Chuka University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Embu on the topic: INFLUENCE OF THE TEACHINGS AND PRACTICES OF THE FULL GOSPEL CHURCHES OF KENYA ON ENVIRONMENTAL CONSERVATION IN EMBU EVUORE DISTRICT, KENYA for the period ending : 18/June/2025.</p>	
License No: NACOSTI/P/24/36707	
554314 Applicant Identification Number	 Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
	Verification QR Code
	
<p>NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.</p>	
See overleaf for conditions	

**APPENDIX IX**  
**EMBU COUNTY COMMISSIONER RESEARCH AUTHORIZATION**



**OFFICE OF THE PRESIDENT**  
**MINISTRY OF INTERIOR AND NATIONAL ADMINISTRATION**

Email: [ccembu@gmail.com](mailto:ccembu@gmail.com)  
When replying please quote ref and date

**County Commissioner**  
Embu County  
P.O. Box 3 - 60100  
**EMBU.**

**Ref: EBU.CC/ADM/3/37 VOL.IV/(52)**

**1<sup>st</sup> July, 2024**

Deputy County Commissioner  
**MBEERE NORTH SUB COUNTY**

**RE: RESEARCH AUTHORIZATION**

Be informed that **Ms. Esther Karuana Rubiri** of Chuka University, License No. **NACOSTI/P/24/36707** has been authorized to carry out Research in your Sub County for the period ending **18<sup>th</sup> June, 2025**.

The Research is based on "Influence of the Teaching and practices of the Full Gospel Churches of Kenya on Environmental conservation in Embu Evurore District, Kenya".

Kindly accord her the necessary assistance.

**PETER KIVUITU**  
**For: COUNTY COMMISSIONER**  
**EMBU COUNTY.**

Copy to:

Esther Kauana Rubiri  
**CHUKA UNIVERSITY.**

**APPENDIX X**  
**SUB COUNTY COMMISSIONER RESEARCH AUTHORISATION**



**OFFICE OF THE PRESIDENT**  
**MINISTRY OF INTERIOR AND NATIONAL ADMINISTRATION**

Telegrams: .....  
Telephone: (068) 21281 Or  
020-2381633  
Fax: (068-21005)  
email: dcmbeerenorth2011@gmail.com  
When replying please quote;

Ref: MBE/ADM.15/14 VOL.II/47

**DEPUTY COUNTY COMMISSIONER**  
**MBEERE NORTH SUB COUNTY**  
**P.O. BOX 197- 60104**  
**SIKAGO**

Date: 10<sup>th</sup> July, 2024

All Assistance County Commissioner  
**MBEERE NORTH SUB COUNTY**

**RE: RESEARCH AUTHORIZATION**

Reference is made to County Commissioner's letter Ref. EBU/CC/ADM/3/37 VOL.IV/ (52) dated 1<sup>st</sup> July, 2024 and addressed to this office.

This is to inform you that, Ms. Esther Karuana Rubiri of Chuka University, License No. NACOSTI/P/24/36707 has been authorized to carry out research in your Sub County for the period ending 18<sup>th</sup> June, 2025.

The research is based on "Influence of the Teaching and practves of the Full gospel churches of Kenya on Environment Conservation in Embu Evurore District, Kenya".

Kindly accord her the necessary assistance.

DAVID OKONG'O  
For: Deputy County Commissioner  
**MBEERE NORTH SUB COUNTY**



Copy to:

County Commissioner  
**EMBU COUNTY**

Esther Karuana Rubiri  
✓ **CHUKA UNIVERSITY**

**APPENDIX XI**  
**LOCATION OF FGCK EMBU EVURORE DISTRICT**

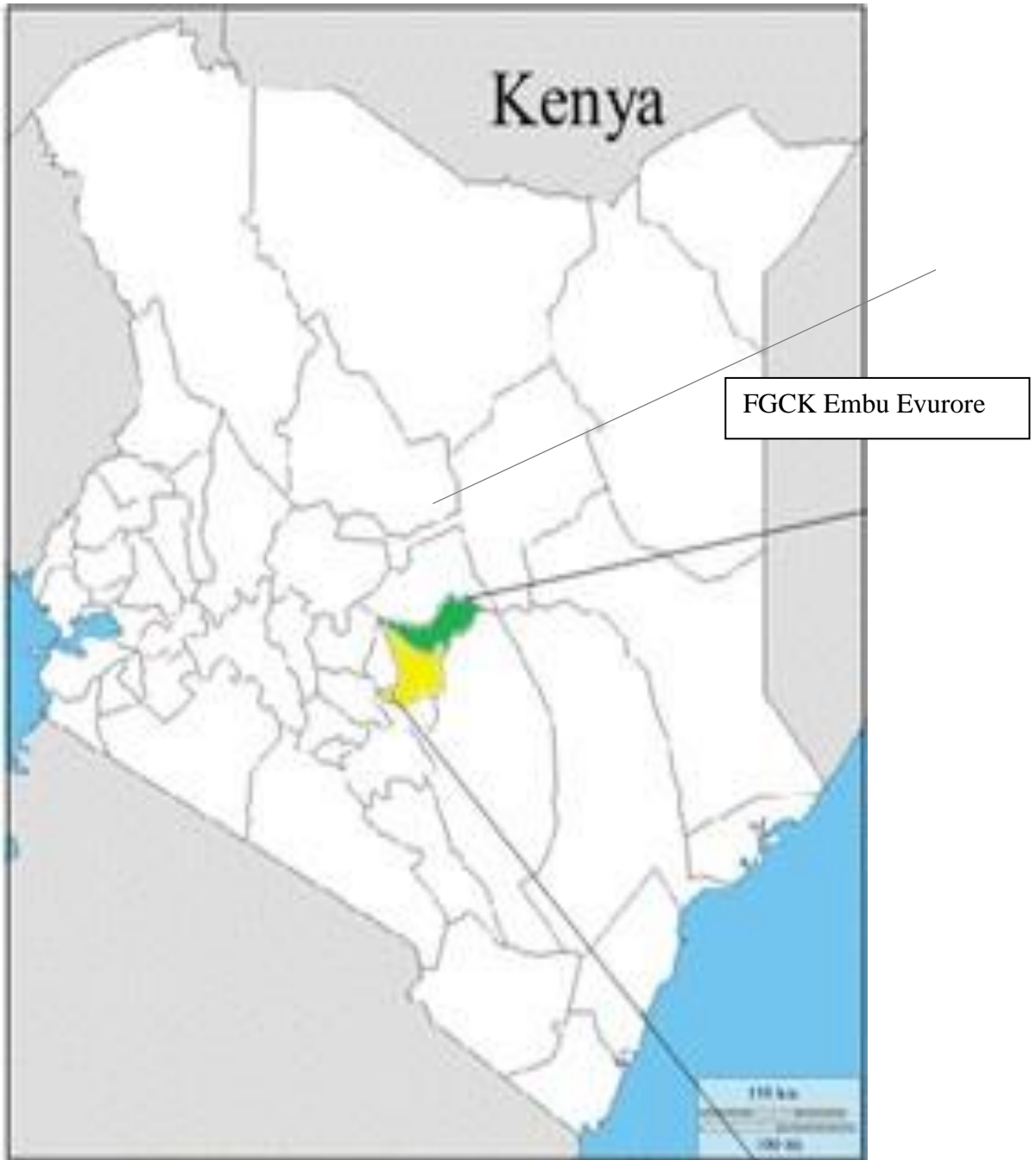


Figure 2. Location of FGCK Embu Evurore District

Source. Siakago Land Survey office

**APPENDIX XII**

**TABLE FOR DETERMINING SAMPLE SIZE FROM A GIVEN POPULATION**

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
s180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

*N* is population size *S* is sample size.

(Source: Kathuri & Pals 2004)

**APPENDIX XIII  
PHOTOS OF ENVIRONMENTAL CONSERVATION IN EMBU EVURORE  
DISTRICT, KENYA**



Figure 13: Empty Milk Sachets Re Used For Environmental Conservation Seedlings Nursery Bed by a Congregant

The reuse of empty milk sachets was evident of environmental conservation since the empty sachets would end up as land or water pollutants as shown in figure 15.

**Other Methods that Can Be Used to Conserve the Environment**



Figure 14: A Tree Nursery



Figure 15: Goats kept in pens



Figure 16: Mulching as a Method of Conservation



Figure 17: Stone Ridges to Control Soil Erosion



Figure 18: Water Trench for Water Conservation and Checking Soil Erosion



Figure 19: Planted Trees Ready for Use



Figure 20: A Session of Environmental Sensitisation

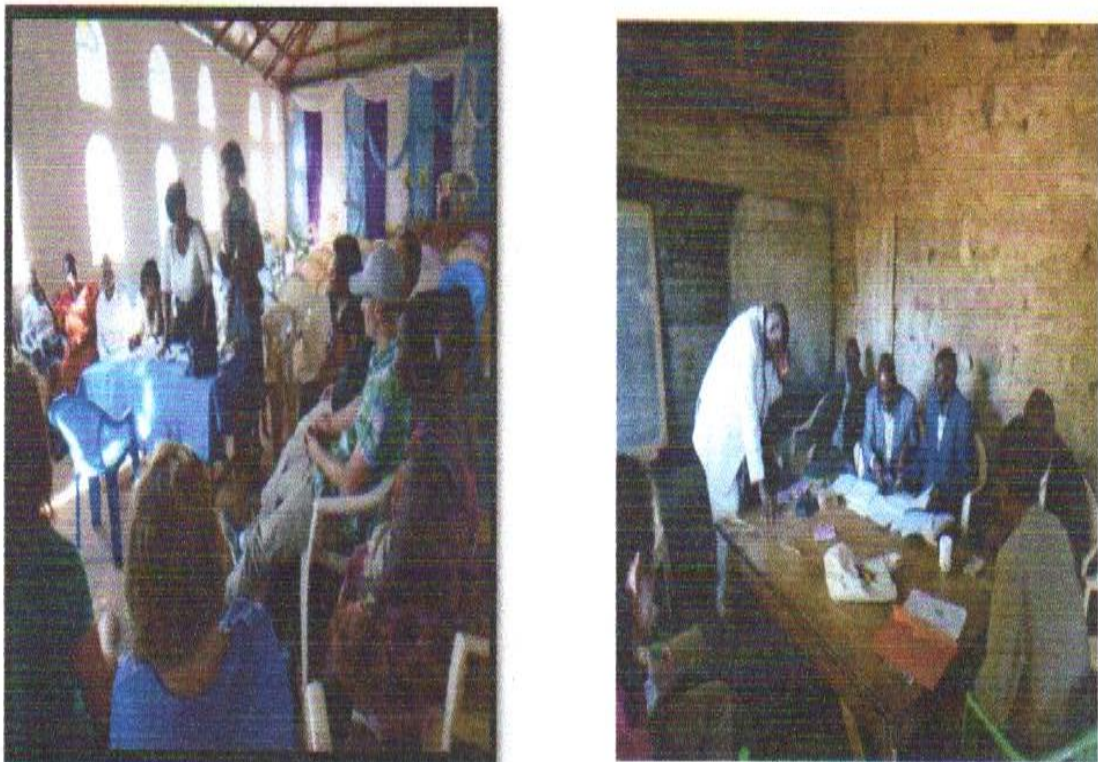


Figure 21: Table Banking Exercises

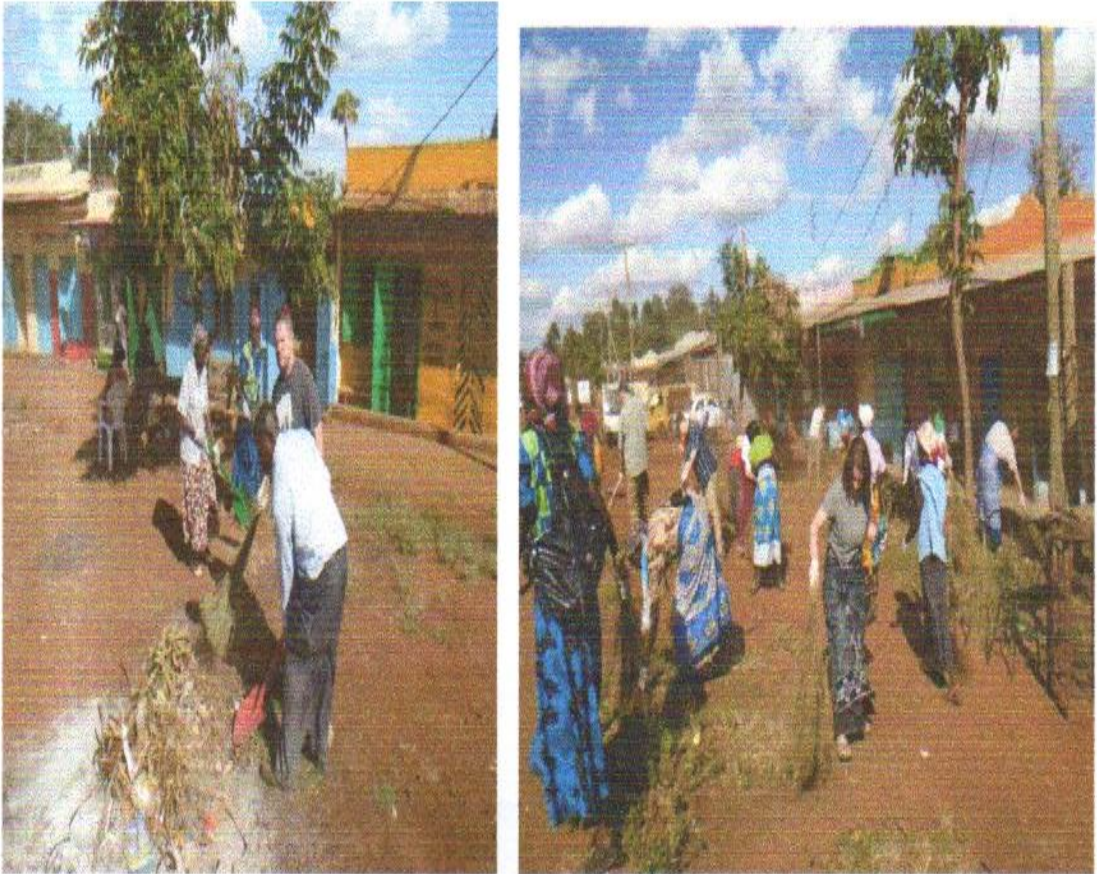


Figure 22: A Clean Up in a Public Utility

Source: Kanyuambora (Narrative File 07/06/2016)