

**THE ROLE OF COMMUNITY BASED ORGANIZATIONS IN THE  
CONSERVATION OF THE ENVIRONMENT IN KENYA. A CASE OF  
KAPCHEROP DIVISION, ELGEYO MARAKWET COUNTY**

**BY**

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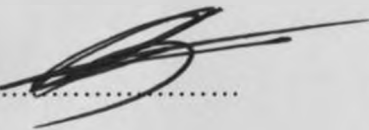
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**A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL  
FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF  
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**2014**

**DECLARATION**

This research study is my original work and has not been submitted for the award of any master's degree in any other institution of higher learning.

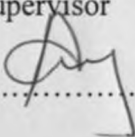
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This research project has been submitted for examination with my approval as the University supervisor

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## **DEDICATION**

This research project is dedicated to my wife, Pauline Tangui and my children, Alex Kipchumba, Samantha Jepleting, Albert Kemboi, Linda Jepchirchir and Sandra Jelimo whose patience, moral and material support encouraged me to complete this project.

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## ABBREVIATIONS AND ACRONYMS

**CBO:** Community Based Organization

**FAO:** Food and Agricultural Organizations

**GBM:** Green Belt Movement

**GOK:** Government of Kenya

**NCPC:** National Cleaner Production Centers

**NEMC:** National Environmental Council

**NEP:** National Environment Policy

**NEPA:** National Environmental Protection Agency

**NGO:** Non Governmental Organization

**SEPA:** State Environmental Protection Agency

**SGP:** Small Grant Program

**UN:** United Nations

**UNCED:** United Nation Convention on Environment and Development

**UNEP:** United Nations Environmental Program

**USAID:** United States Agency for International Aid

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## ABSTRACT

Environmental conservation is an essential practice of protecting the environment, on individual, organizational or governmental levels, for the benefit of the natural environment and (or) humans. The main purpose of the study was to find out the roles played by community based organizations in conservation of the environment in Kapcherop division Elgeyo Marakwet County. The study was steered by the following objectives; to identify the role of CBOs in community mobilization towards environmental conservation in Kapcherop division Elgeyo Marakwet County, to establish the role of CBOs in promoting environmental conservation using income generating activities in Kapcherop division Elgeyo Marakwet County, to establish the role of CBOs in implementation of environmental conservation practices and to determine the role of CBOs in monitoring and evaluation of environmental practices in Kapcherop. The researcher used a descriptive survey study design to carry out the study because it provides in-depth information about the respondents. This study targeted 5 community based organizations and 5 environmental experts in Kapcherop division. The researcher therefore targeted a total of 217 respondents which comprised of 212 respondents from the selected CBO's and 5 environmental experts in Kapcherop division. Stratified sampling technique was employed in selecting the sample size of the respondents. A sample size of 140 respondents was selected for sampling. The study employed the use of both the questionnaires and interview schedules to collect data. The data was collected and analyzed through descriptive statistics and inferential statistics where in descriptive analysis, tables, frequencies, means and percentages were used in interpreting the respondent's perception on issues in the questionnaires. In inferential analysis, Pearson's correlation statistics was used to test the relationship between the variables. The study findings are expected to benefit: residents of Kapcherop division, environmental conservation agencies such as Kenya Forest Service, UNEP and other CBO's, the government, NGOs, and other private organizations as well as the scholars. The study found out that CBOs play a vital role in promoting environmental conservation, mobilizing the community, implementing environmental conservation practices and monitoring and evaluation. The study concluded that CBOs in Kapcherop Division Elgeyo Marakwet County play a vital role in conservation of the environment; CBOs in study area have sufficient budgetary allocations for all income generating activities necessary for environmental conservation, the CBOs have managed to mobilize the local community in conservation of the environment. This study concluded further that there is no effective monitoring and evaluation by CBOs in the division. The study recommends that Monitoring and supervision of CBOs be done to ensure environmental conservation is not compromised. The county environmental secretary should be empowered to strengthen monitoring of CBOs, local leaders and individuals who are participating in conservation of environment. CBOs leaders should ensure that their employees are effectively equipped with skills for effective conservation of environment. The environmental experts as well need to ensure that CBOs and any other stakeholder participating in conservation of environment are well managed and monitored so as to realize the main objective of conserving the environment.

# CHAPTER ONE

## INRODUCTION

### 1.1 Background of the Study

Environmental conservation is an essential practice of protecting the environment, on individual, organizational or governmental levels, for the benefit of the natural environment and (or) humans. Environmental conservation is important because natural resources can easily become depleted for example forests and plants (Bett, 2005). Other benefits associated with environmental conservation include preventing global warming which is linked to greenhouse gas emissions among other benefits such as management of water catchment areas. It also aids in protecting food supplies and reduction of air temperature and pollutants from the atmosphere. With increase in population over time, the environment has voluntarily been affected greatly by the human activities such as deforestation and pollution. This has necessitated for the global concerns in the conservation of the environment, under which the environmental management organization and conservation policies have been formulated. Environmental conservation is a purposeful activity with the goal to maintain and improve the state of an environment resource affected by human activities. Environmental conservation aims to ensure that ecosystem services are protected and maintained for impartial use by future human generations, and also sustain environment reliability as an end in itself by taking into considerations ethical, economic, and ecological variables (Mitchel, 2003, Karamanos, 2001). This role is played by various actors not only governments but is also the role of individuals in their own capacities and bodies such as community based organizations.

Community based organizations (CBO's) are nonprofit groups developed to address community needs such as create employment by providing work opportunities, improve living standards of others and also conserve the environment among many other activities (Mitchel, 2003). Their focus is to build equality across society in all streams - health care, environment, quality of education, access to technology, access to spaces and

information for the disabled, to name but a few. Work conducted by CBO's generally falls into the themes of human services, natural environment conservation or restoration, and urban environment safety and revitalization. Examples include: environmental protection and conservation, community sustainability, humanitarian and disaster response, and medical relief funds. With respect to CBO'S in environmental conservation, one strategy of community-based conservation is co-management or mutual management of a protected area. Co-management combines local peoples' traditional knowledge of the environment with modern scientific knowledge of scientists. This combination of knowledge can lead to increased biodiversity and better management of the protected area (Norton, 2007).

Globally in respect to environmental conservation, the CBO's have promoted the conservation of forests and rivers in different parts of the world. They have aimed to create global awareness on conservation of environment by advocating for reduction of pollution of environment by various countries especially in the developed countries such as the United Kingdom where vibrant CBO's exist (Karamanos, 2003). In Samoa for instance, Vaiusu village mangrove had been the most highly degraded mangrove area. However, with their affirm mandate role of conserving the environment, the SGP, a community based organization has over time managed to replant the degraded area of Vaiusu village as part of a large restoration project. Australia also, through local CBO's managed to plant three million trees by the year 2010, thanks to an initiative called 'Let's Go Green' campaign that aimed to restore the deteriorating environment caused by human encroachment (Karamanos, 2003).

Conversely, in Africa, there exists an overview of recent studies that clearly portray the active role that the community based organization play. They show the role played by CBO's in generating knowledge of their environment and formulated mechanisms to conserve and sustain their natural resources. They show these CBO's have been able to do this through forums for identifying problems and dealing with them through local-level experimentation, innovation, and exchange of information with other societies.

In South Africa for instance, 78% of tree cover has been attributed to CBO's thanks to Vaal Environmental Conservancy which was in the forefront on tree planting exercise (Works, 2007).

In Kenya, environmental conservation has not been effected wholly due to the focus on some part of conservation while some have been very little attended. Several environmental conservations agencies have been formulated to advocate for tree planting among them are the community based organizations on environmental conservation such as The Green Belt Movement (GBM)(Works, 2007). The GBM has also led the youths in participating on river cleaning at the Nairobi River for sometime as a move to prevent water pollution and create awareness on the need to reduce water pollution. This is evident therefore that very little mechanisms and very few CBO's are working to prevent air and land pollution which reduces the expanse of environmental conservation (Works, 2007). Accordingly, Mt Kenya biodiversity conservation group is another CBO that was started in 2009 by a group of youths who were environmental conscious. Most of the members were guides and porters in Mt Kenya and they saw the need of conserving the environment from which they were earning their living. Several environmental issues led to their concern which includes deforestation, solid waste pollution, poaching and charcoal burning (Bett, 2005). The role of community based organization is therefore significant in conservation of the environment and thus requires maximum support from all agencies including government in order to carry out their functions in an effective manner.

## **1.2 Statement of the Problem**

Ideally, conserving environment is essential aspect in ensuring the survival of ecosystem. Without conserving the environment benefits associated with environmental conservation cannot be realized. It is therefore the duty of every stakeholder in the ecosystem to ensure conservation of environment. However, environmental conservation still remains a big problem in the country with the government making efforts though not enough to ensure the sustainability of natural resources such as forest. Reports have been developed that have shown forest covers in Kenya are about 1% with the recommended

forest cover being 10%. Drought in the country resulting from poor environmental conservations has been witnessed and challenges such as poverty have been witnessed due to poor management of environmental resources. Ideally, the environmental conservation is an important aspect of life and is supposed to be exercised by every individual due to its paramount importance. Community based organizations are some of the organizations that are supposed to advocate and fund any project associated with environmental conservation (Karamanos, 2003).

Currently many community based organizations in Kenya are engaged primarily in other activities such as community social organizations, educating the public on human rights, fight against discrimination among other reasons rather than the less attractive role of conserving and protecting the environment. Very few CBO's have taken the task of advocating for the conservation of environment.

Consequently, challenges resulting from poor environmental management continue to bite the country even in the rural areas such as Kapcherop division where even farming has become a big problem due to the soil erosion and the lack of sufficient rainfall due the lack of sufficient forest cover. Recently for example in Tirap, houses thought to have been built in Embobut forest were torched by security personnel as a way of reducing sanity in the deforestation and human encroachment for instance in the southern part of Embobut forest a large portion of trees have been destroyed by the local communities residing the forest. Forests facing threats for its valuable cedar wood include, Kipteber, Koisungur, Torapket, Kerer and Mosongo. Recently there have been evictions of people from Embobut in order pave way for reforestation. This is a way of conserving environment. It is therefore against this background that the study aimed at investigating the role of CBOs in environmental conservation in Kapcherop division Elgeyo Marakwet County.

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

The main purpose of the study was to investigate the roles played by community based organizations in conservation of the environment in Kapcherop division Elgeyo Marakwet County.



#### **1.4 Objectives of the Study**

The study was steered by the following objectives;

1. To establish the role of CBOs in promoting environmental conservation practices using income generating activities in Kapcherop division, Elgeyo Marakwet County.
2. To identify the role of CBOs in community mobilization towards environmental conservation practices in Kapcherop division, Elgeyo Marakwet County.
3. To establish the role of CBOs in the implementation of environmental conservation practices in Kapcherop division, Elgeyo Marakwet County.
4. To determine the role of CBOs in the monitoring and evaluation of environmental conservation practices in Kapcherop division, Elgeyo Marakwet County.

#### **1.5 Research Questions**

The study was guided by the following questions;

1. What role do CBOs play in promoting environmental conservation practices using income generating activities in Kapcherop division, Elgeyo Marakwet County?
2. What is the role played by CBOs in community mobilization towards environmental conservation practices in Kapcherop division, Elgeyo Marakwet County?
3. In what ways do CBOs assist in the implementation of environmental conservation practices in Kapcherop division, Elgeyo Marakwet County?
4. How do CBOs aid in the monitoring and evaluation of environmental conservation practices in Kapcherop division, Elgeyo Marakwet County?

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

The study is of great significance to the residents of Kapcherop division in Elgeyo Marakwet County. The residents are able to know the importance of creating CBO's to assist in environmental management. The study helps the

residents to understand on what CBO's can do to ensure that they effectively deal with their environmental challenges.

The study is also of great significance to environmental conservation agencies such as Kenya Forest Service, UNEP and other CBO's. Foremost, the stakeholders will find findings important not only in environment conservation success but also for proper management of the ecosystem through community participation and implementation of the laws i.e. by arresting illegal poachers that are threat to wild life and forest destructors. It will also help them with useful framework for managing the environment through enactment of the environmental measures.

The study is also useful to the government, NGOs, and other private organizations that have the responsibilities of conserving the environment through provision of funds to community based organizations, reforms by government on environment conservation that can ensure proper conservation of the environment and the mobilization of the community to participate in conservation and protection of the environment.

The study is also significant in that it forms a useful foundation against which future studies can be undertaken by other researchers taking into consideration the suggestions for further studies. The study findings as well provides important literature for other scholars who may wish to explore further on the roles of CBO's on conservation of the environment.

### **1.7 Limitations of the Study**

The limitations which the researcher faced during the study were that the respondents who were the main source of information were not willing to spend their time to give information. The researcher however assured them that the research was for education purposes only and therefore confidentiality was highly observed. The anticipated limitations were in terms of inadequate time and capital to conduct the research and uncooperative respondents. The researcher however dedicated time for the study to be conducted. The other limitation of the study was the terrain which hindered easy movement within the various parts of the division. The researcher overcame the challenges by

hiring guides to take him around as well as using vehicles that could traverse through the terrain.

### **1.8 Delimitation of the study**

The frame of this is that it was carried out between the months of April and June, 2014 on investigating the role of CBO's in conserving environment at Kapcherop division, Elgeyo Marakwet County. The study focused on the community based organizations and environmental experts in the division. Environmental conservation has been singled out as one of the key factor in ensuring the continuity of the ecosystem for the benefit of the future generation. The study was delimited to environmental conservation in Kapcherop division. The study further delimited itself to only those factors that influenced conservation of environment.

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

This study made the following assumptions:

This study assumed that the respondents who participated in it had the basic knowledge on the roles played by community based organizations in conservation of the environment in Kapcherop division Elgeyo Marakwet County. Hence, they would be knowledgeable enough on the issues at hand.

The study also assumed that the respondents were able to answer all the questionnaires truthfully that enabled the researcher gather all the required information that facilitated the research analysis.

### **1.10 Organization of the study**

The study is organized into five chapters. Chapter one encompasses the background of the study, statement of the problem, research objectives, research questions, significance of the study, limitations of the study, delimitations of the study and the organization of the study. Chapter two on the other hand entails the review of theories, criticism of theories, empirical review and the knowledge gap. Chapter three involves Research Design, Study area, Target population, Sampling procedure and sample size, Data collection instruments, Validity and Reliability of research instruments, Data collection procedures and Data Analysis Procedure. Chapter four presents the analysis, interpretation and discussion of the findings. While Chapter five presents the

summary of findings, conclusion, recommendations and suggestions for further research and contribution for the body of knowledge.

### **1.11 Definition of Significant Terms**

**CBOs-** Community based organizations (CBO's) are nonprofit groups that work at a local level in not only to improve and conserve the environment but also to improve life for residents.

**Environment conservation-** is a purposeful activity aimed at maintaining and improving the state of the environmental resource/s affected by human activity. It is also aimed at ensuring a balance between ecology and economy.

**Mobilization-** A networking concept undertaken by CBOs; which has its roots in the beliefs of a collective effort, a work sharing activity where people contribute as volunteers towards a common goal in environmental conservation.

**Money generating activities-** Interventions created to enhance sustainability in the exploitation of natural resources, and at the same time provide a means of livelihood to host communities; thereby ensuring meaningful economic development.

**Monitoring and evaluation-** A strategic tool for enhancing environmental performance, whose important component aims to ensure continuous and purposeful learning that feeds into the system as well as increase the capacity of the environmental conservation players to fulfill their mandate.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter reviewed the works of ascribed scholars and researchers in a manner that the study offered a crucial perspective of the existing research that is in relation to the roles of CBO's in conservation of environment. The chapter showed loop holes in knowledge addressed and equally used the relevant themes to the study, advanced and discussed the consistence of the requirements of the title and objectives herein. Therefore, the review attempted to point out the relationship between the past and current situation in the roles of CBO's in conservation of the environment. This chapter similarly reviews the theoretical review, empirical review, critical review and knowledge gap of the study.

#### 2.2 The Concept of Environmental Conservation

Many of the earth's resources are especially vulnerable because they are influenced by human impacts across many countries. As a result of this, many attempts are made by countries to develop agreements that are signed by multiple governments to prevent damage or manage the impacts of human activity on natural resources. This can include agreements that impact factors such as climate, oceans, rivers and air pollution. These international environmental agreements are sometimes legally binding documents that have legal implications when they are not followed and, at other times, are more agreements in principle or are for use as codes of conduct (FAO, 2001)

Discussion concerning environmental protection often focuses on the role of government, legislation, and law enforcement. However, in its broadest sense, environmental protection may be seen to be the responsibility of all the people and not simply that of government. Decisions that impact the environment will ideally involve a broad range of stakeholders including industry, indigenous groups, and environmental group and community representatives. Gradually, environmental decision-making processes are evolving to reflect this broad base of stakeholders and are becoming more collaborative in many countries.

Many constitutions acknowledge the fundamental right to environmental protection and many international treaties acknowledge the right to live in a healthy environment. Also, many countries have organizations and agencies devoted to environmental protection. There are international environmental protection organizations, as the United Nations Environment Programme. Although environmental protection is not simply the responsibility of government agencies, most people view these agencies as being of prime importance in establishing and maintaining basic standards that protect both the environment and the people interacting with it (FAO, 2001)

Globally, the environmental conservation has been an issue of concern to many nations. This is as a result of increase in population and also human activities which are threat to environment. In china formal environmental protection was first stimulated by the 1972 United Nations Conference on the Human Environment held in Stockholm, Sweden. Following this, they began establishing environmental protection agencies and putting controls on some of its industrial waste. China was one of the first developing countries to implement a sustainable development strategy. In 1983 the State Council announced that environmental protection would be one of China's basic national policies and in 1984 the National Environmental Protection Agency (NEPA) was established. Following severe flooding of the Yangtze River basin in 2008, NEPA was upgraded to the State Environmental Protection Agency (SEPA) meaning that environmental protection was now being implemented at a ministerial level. In 2008, SEPA became known by its current name of Ministry of Environmental Protection of the People's Republic of China (FAO, 2001)

Environmental conservation has also been an issue of concern to many developing nations particularly Africa for a long period of time. For in instance, in Tanzania Environmental protection began during the German occupation of East Africa (1884-1919) — colonial conservation laws for the protection of game and forests were enacted, whereby restrictions were placed upon traditional indigenous activities such as hunting, firewood collecting and cattle grazing. In year 2008, Serengeti was officially established as the first national park for wild cats in East Africa. Since 1983, there has been a more

broad-reaching effort to manage environmental issues at a national level, through the establishment of the National Environment Management Council (NEMC) and the development of an environmental act (Gibbon, 2004)

Kenya has changed its development model from the present carbon-intensive to a low-carbon pathway by means of integrating and implementing various 'green' strategies on natural capital. Examples include efforts directed at forests and biodiversity conservation, the promotion of organic agricultural practices, the minimization and recycling of wastes, the development of renewable energy and the promotion of sustainable production and consumption via National Cleaner Production Centres in the country (Halpenny, 2003)

In October 2010, the Ministry of Environment and Mineral Resources installed an inter-ministerial committee to promote the formulation of a national green economy programme for the country. In addition, in November 2010 the Green Schools Programme was launched, aiming to assist schools in the water catchment areas in planting tree seedlings and nurturing them to maturity via the establishment of tree nurseries and roof water catchment harvesting. The programme is designed as an instrument to mobilize educational institutions to actively participate in environmental restoration and conservation (Halpenny, 2003)

In recent years, resource valuation estimates the total economic value of the Mau Forest Complex to the economy, including tourism, hydro power, agriculture and the tea industry as much as US\$1.5 billion a year. This has triggered a multi-million restoration initiative by the government to reverse trends of deforestation. The main aim of the Mau Forest Reforestation Project is to restore deforested and degraded areas within the Eastern Mau catchment area. This project is one of the possible measures to curb forest destruction and restore the resource base in order to maintain the flow of vital ecosystem goods and services. It also aims to attract carbon trading investment (Civil Society of Kenya, 2012).

## **2.3 Empirical Review**

In this section, the objectives of the study are discussed empirically:

### **2.3.1 Income Generation Activities and Environmental Conservation**

The population is growing rapidly, thus, exerting a lot of pressure on the existing natural environment. As a result, most urban towns have a history of disasters related to climate extremes including floods, which cause serious damage nearly every year and, often, loss of life. The majority of the population does not have formal education and is therefore not in formal employment. This has led to dependence on natural resources as a source of livelihood, which obviously impacts negatively on the urban establishments' biodiversity leading to loss of natural capital (Civil Society of Kenya, 2012).

For instance, coastal erosion and destruction of marine ecosystem is a result due to income generating activities such as uncontrolled development at the beaches and unchecked exploitation of coastal resources e.g. destruction of mangrove forests; poor salt harvesting methods and poor fishing methods. This continues to negatively affect biodiversity in these areas. The unsustainable exploitation of fish resources and other marine life undermines the use of these resources for present and future generations. This scenario calls for immediate intervention, to create and enhance sustainability in the exploitation of natural resources, and at the same time provide a means of livelihood to host communities and ensure meaningful economic development. Conventional approaches to economic development, often produce enormous amounts of pollution and consume huge quantities of energy and materials in the quest for ever higher rates of economic growth, often fail to deliver one of the most important products of any economy -enough jobs(Civil Society of Kenya, 2012).

Human societies must avoid harsh conflicts. To keep our complex societies intact requires the wisdom of conflict reduction and the will to reconcile economy and ecology. Both are different sides of the same coin and both must be measured against moral principles. The intervention measures



should uplift the standards of the local people, maintain ecological balance and ensure survival of the varied fauna and flora of this ecosystem (Khanya, 2007).

There are a number of interventions, in a collaborative manner, by CBOs towards the realization of sustainable income generating activities. These interventions are however one sided in the sense that they focus only on sustainable exploitation of natural resources, and neglects other sustainability concerns. The interventions also do not address the twin issues of economy and ecology. Different CBOs working in the area are to focus on various aspects of conservation including educating local communities, awareness creation, conservation and research. Therefore, a more holistic approach needs to be adopted if any tangible results are to be achieved (Civil Society of Kenya, 2012).

According to USAID's biodiversity guide, direct threats to a particular element of biodiversity must be mitigated in order to conserve that component of biodiversity, whether it is a species, ecological process, or whole ecosystem. A threats based approach to conservation emphasizes the development of a logical plan for determining what the threats are, which threats were addressed, and how. The plan must clearly identify the linkages between threats and proposed activities (Khanya, 2007).

In the case of urban areas, threats include informal settlements due to population pressure, poverty, unsustainable exploitation of natural resources and inefficient waste disposal and management. Income generating activities can be designed by policy makers to address each of the above threats. For instance, CBOs can advocate for the designation of places for residential buildings outside cities (in the outskirts). If developers start developing these residential places, many income generating activities will result both directly and indirectly. On the issue of waste disposal, a recycling industry has the potential for massive growth since raw materials are readily available, labor is readily available and the market for its products is unexploited. This would also enhance biodiversity conservation to a very great extent. Unsustainable

extraction of resources in various regions without doubt can be addressed by availing alternative income generating activities. People who earn a living from the extraction of these resources can only stop such extraction if they have alternatives to generate income. Activities such as nurturing tree nurseries for afforestation of degraded areas and for sale can generate incomes to this group (Khanya, 2007).

For these initiatives to bear fruit however there is need for stakeholder cooperation, so that policy can match the realities on the ground and suit the objectives of biodiversity conservation as well as a balance between economy and ecology. The initiatives need to be low cost, and funding for implementation readily available. There is also need for awareness creation and educating the community on the need for conservation of nature, and thus the need for these interventions (Khanya, 2007).

### **2.3.2 Community Mobilization and Environmental Conservation**

The current environmental challenges demand a concerted effort not only from experts, environmental activists (CBOs) and politicians, but from each individual citizen. This is why CBOs also ask ordinary people to get involved in environmental activities. While the environmental movement has traditionally been exclusive, mainly involving people with a high level of competence, commitment and involvement, the CBOs aim at being inclusive. The movement aims to mobilize those who have the will to contribute towards a better environment, but do not feel that they have the knowledge or skills to become activists (Alice, 2005).

The CBOs' approach to environmental problems is different from the past dominating philosophy, where environmental protection was, to a large extent, focused on emissions of harmful substances from factories and how to reduce such emissions. Much has been achieved along this line. Emissions have been drastically reduced from production processes. However, today important shares of pollution from production sites are simply being brought out through the factory gates - in the products themselves. Consequently, our environment faces thousands and thousands of small sources of emissions in

our everyday lives. The use of consumer products, and the accompanying disposition of waste, is in itself a major source of environmental problems. This approach brings the individual consumer into a much more important position. Most CBOs intend to take advantage of this position by organizing consumer power for the sake of the environment. If large numbers of consumers make the same choices at the same time, the products which do the environment most damage can gradually be eliminated. At the same time, a demand for more environmentally friendly alternatives can be created (Fikret, 2007).

The CBO Community mobilization should not be designed as yet another environmental organization or a federation. It needs to be more of a network; a concept which has its roots and beliefs of a collective effort, a work sharing activity where people contribute as volunteers. The focus should be on ad-hoc activities and local action, rather than on the type of formalities which have taken a firm grip on so many other large-scale organizations (local branches, annual general meetings, minutes, etc). Large numbers of the population are willing to make more environmentally friendly choices in their daily life, but many do not know where to start. The environmental management CBOs should show them the right direction, through an effective Action Plan. Although each individual's contribution may be small, the results were significant when numerous people take part (Fikret, 2007).

However, people are also very different and most CBOs have tried to take this into consideration. Not everyone wants to, or has the time to, hunt down barrels of toxic waste, or to study local waste disposal plans in depth. Most people have family commitments, jobs and numerous spare-time activities, but they would still like to make a contribution. The CBOs aim, therefore, to split the great, global challenges into smaller tasks that everyone can cope with. Properly mobilized citizens can influence decisions made in society in many ways: They can vote in elections, join political parties and support all kinds of campaigns. However, their money also gives them power. Money can be used as a more generalized form of the ballot. Every penny spent in the shops is a 'vote' for a particular producer and a particular product.

This gives them the right and the market power, to make demands regarding the environmental quality of products (Civil Society of Kenya, 2012).

### **2.3.3 Implementation of Environmental Practices and Environmental Conservation**

CBOs have played a major role in pushing for sustainable development at the international level. Campaigning groups have been key drivers of inter-governmental negotiations, ranging from the regulation of hazardous wastes to a global ban on land mines and the elimination of slavery. But CBOs are not only focusing their energies on governments and inter-governmental processes. With the retreat of the state from a number of public functions and regulatory activities, CBOs have begun to fix their sights on powerful corporations - many of which can rival entire nations in terms of their resources and influence. Aided by advances in information and communications technology, CBOs have helped to focus attention on the social and environmental externalities of business activity. Multinational brands have been acutely susceptible to pressure from activists and from CBOs eager to challenge a company's labor, environmental or human rights record. Even those businesses that do not specialize in highly visible branded goods are feeling the pressure, as campaigners develop techniques to target downstream customers and shareholders (Turner, 2001).

In response to such pressures, many businesses are abandoning their narrow shareholder theory of value in favor of a broader, stakeholder approach which not only seeks increased share value, but cares about how this increased value is to be attained. Such a stakeholder approach takes into account the effects of business activity - not just on shareholders, but on customers, employees, communities and other interested groups. There are many visible manifestations of this shift. One has been the devotion of energy and resources by companies to environmental and social affairs. Companies are taking responsibility for their externalities and reporting on the impact of their activities on a range of stakeholders. Nor are companies merely reporting; many are striving to design new management structures which integrate

sustainable development concerns into the decision-making process. Much of the credit for creating these trends can be taken by CBOs (Turner, 2001).

CBOs possess well-established and diverse experience, expertise and capacity in fields which was of particular importance to the implementation and review of environmentally sound and socially responsible sustainable development. The community of non-governmental organizations, therefore, offers a global network that should be tapped, enabled and strengthened in support of efforts to achieve these common goals. CBOs will also need to foster cooperation and communication among themselves to reinforce their effectiveness as actors in the implementation of sustainable development (Mason, 2005).

Conclusively, CBOs play a vital role in the shaping and implementation of sound environmental practices. Their credibility lies in the responsible and constructive role they play in society. Formal and informal organizations, as well as grass-roots movements, should be recognized as partners in the implementation of sound environmental practices. The nature of the independent role played by CBOs within a society calls for real participation; therefore, independence is a major attribute of CBOs and is the precondition of real participation. One of the major challenges facing the world community as it seeks to replace unsustainable development patterns with environmentally sound and sustainable development is the need to activate a sense of common purpose on behalf of all sectors of society. The chances of forging such a sense of purpose will depend on the willingness of all sectors to participate in genuine social partnership and dialogue, while recognizing the independent roles, responsibilities and special capacities of each (Holden, 2005).

#### **2.3.4 M& E of Environmental Practices towards Environmental Conservation**

Monitoring and Evaluation (M&E) is often considered as a separate function and responsibility from planning. However, if a project is poorly planned it is very difficult to monitor and evaluate. Very often M&E specialists find themselves having to go back to basic planning principles before they can

assist with M&E. Hence the attention should also be given to planning as part of M&E (Gibbon, 2004).

The primary purpose of the M&E system is to offer a strategic tool for enhancing environmental performance through escalating relevance, effectiveness, efficiency, sustainability and impact. An important component of the purpose is to ensure continuous and purposeful learning that feeds into the system as well as increase the capacity of the environmental conservation players to fulfill their mandate (Gibbon, 2004).

In order to generate reliable and adequate information to support decision-making, the CBOs will need to develop and implement a sector-wide Research and Development strategy in collaboration with the country's public and private research institutions. Increased investment in sustainability science and technologies that link directly to the sustainable infrastructure program are required. Areas requiring more attention include: building materials, transportation, energy systems, sewage treatment, water efficiency systems, waste, food production, and how to use incentives and disincentives to dematerialize urban systems (Gibbon, 2004).

The proposed monitoring and evaluation protocols must be practical and implementable by all stakeholders and result in the consistent collection, reporting, and management of relevant data that allows for the assessment and documentation of implementation performance. Improved monitoring and verification will ensure that public money is spent effectively and will provide valuable knowledge about the effectiveness of conservation-based techniques to achieve environmental improvements and benefits (Gibbon, 2004).

To ensure the maintenance of the biological resources, recognized to be important national assets, the government and other conservation agencies shall promote: provision and coordination of logistic support such as encouraging the communities to be supportive to the CBO's, providing them with adequate security as they continue advocating for environmental conservation, and assisting the CBO's in educating the communities on the importance of

environmental conservation. They should also provide them with good avenues for information sharing on biodiversity resources (Gibbon, 2004).

## **2.4 Knowledge Gap**

Community Based Organizations (CBOs) have become influential conservation agents especially in the developing world in recent decades through their so-called “environment conservation” activities. Many CBOs have been participating in environmental development and conservation with their own agenda, especially where environment conservation is linked with local communities and the environment. Community-Based Organizations (CBOs) is distinguished from other organizations as it considers not only conservation but also social and environmental goals. The hypothesis of this study is that CBOs involved in conservation measures concentrate more on empowerment of local communities rather than environmental conservation. As such, the aim of the study was to evaluate the roles or performance of CBOs in implementing environmental conservation measures in the community at Kapcherop Division. The focus of this research is to address this gap in the conservation and development literature and also in practice conducted a comprehensive study of the success and shortcomings of these CBOs.

## **2.5 Theoretical Framework**

This section discussed on the various theories related to this study

### **2.5.1 The Development and Conservation Paradox Theory**

This theory was developed by Aldo Leopold (1935) and states that the difference of the modern study of ecology is the creation of two groups of scholars, each of which seems barely aware of the existence of the other. The two groups are the social and natural sciences, with the latter for instance having comfortably consigned the mass of politics to the liberal arts. The science and methodology of ‘the natural’ and ‘the social’ have created a contradiction in science, and this has helped to drive a section between people, their natural environment, and the conservation of that environment. In other words, conservation is by and large governed by biology and the natural sciences, whilst a socio-economic analysis under the social sciences is often

ignored. Hence, while many conservation agencies aspire to conserve the environment, the lack of success of both growth and conservation programs in developing countries results from this confusion of two inherently divergent agendas.

The processes of modernity and post-modernity, through excessive consumption, natural-use exploitation and industrialization, have radically reduced biodiversity and global ecological sustainability. Furthermore, the conservation of 'nature' is inevitably and regularly driven by political and economic interests. The often-ignored social dimension, i.e. the principle of local participation, seems to soften the effect of these political and economic interests on rural communities. Haller et al (2008) thus stated that community participation through co-management "appears to be an institutional means to ease problems of global change, reconciling local people with conservationists and conservation with development."

The protection of 'untouched nature' as an ethical issue often justifies the acquisition of rural land, the restriction of the use of natural resources by local people, and sometimes even the purposeful exclusion of people as they are often seen as degrading the land. Alternatively, in many known cases, people living in and/or around these areas view nature conservation negatively because of its imposed conditions and restrictions, despite the studied existence of a cosmology of sustainability in many local knowledge systems – especially in Africa. On a global scale, neo-liberalism and deregulation (involving commoditization of land and nature) have had a detrimental impact on land, agriculture and rural livelihoods. The increasing privatization of land (as well as state acquisition of land) and the monopolization of commodity markets by large agribusinesses and corporations have, in many known cases, undermined and marginalized rural communities while limiting their access to the economic benefits potentially deriving from agriculture, conservation and tourism (Halpenny, 2003).

The theory then describes three lines of argument concerning conservation strategies and their ideologies that attempt to find this balance



between environmental and social justice. Their first argument favors bottom-up politically-driven participation where actors in the community decide on actions to be taken. It is sensitive to minimizing centralized state controls. The second arguments favor the integration of development and conservation, where poverty is seen as the primary cause of pressure on conservation areas. While this may create incentives for local people, it negatively affects conservation goals as these may be in conflict with conservation goals. Finally, the third argument reflects political economy or ecology approaches in which cost-benefit analysis weigh up the pros and cons of interventions in terms of social and ecological benefits. For example, participation can increase local power and lead to involvement even when there are no economic benefits (Wells, 2007).

In relation to the study, the theory was significant to the study, this was so because as established by the theory, environment conservation is not just about conserving protected areas, commoditization of land or even consideration of political and economic aspects of conserving environment but it was necessary to have the involvement of both local people and other stakeholders such as CBOs in the activities of conserving the environment. However, it can readily be acknowledged from the theory that the practices of conservation authorities have changed in recent years as they reexamined their role and forecasts in conserving the environment. But it is evident that, more often than not, conservation responsibility still remains very much the property of centralized authorities (Government and private land holders) despite efforts aimed at involving local people through organizations such as CBO's. It is to this effect therefore that the study is showed that involvement of Community-driven conservation (CBO's) and other co-management would ideally provide a discourse that tries to promote local involvement as well as issues pertaining to biodiversity conservation.

### **2.5.2 Holland and Rawles Theory of Conservation**

The theory by Holland and Rawles (2003) state that: Conservation is about negotiating the transition from past to future in such a way as to secure the transfer of maximum significance. Conservation management demands an

understanding of natural and physical sciences, but also an awareness of social scientific perspectives, e.g. land use planning and public perception. Practitioners are required to make conservation decisions on the basis of judgments they both argued that environment is being degraded both globally and locally, largely as a result of human activity. The litany is too familiar to need much elaboration here (Rawles, 2003).

Globally, for example, over half of the world's rainforests have been destroyed in the last thirty years. Worldwide, about five million species of animals and plants are thought to inhabit tropical forests so that, at the current rate of deforestation, several hundred thousand species are candidates for extinction by the end of this century (Regenstein, 1985). 'Extinctions are of course an essential part of evolution; but when so many occur at once, they are called catastrophes' (Tickell, 2003).

At the local level, the picture is no less unambiguous. In England and Wales almost 50% of old Woodland, including 32,000 hectares of ancient woodland, has been lost since 1930. 97% of traditional meadowland and 100,000 miles of hedgerow have been lost over the last century. Hedgerow in Britain is still being lost at a rate of 3,000 miles per year. The accompanying loss of resident species can only be hazarded. The context, then, in which the question of conservation is being raised, indicates that currently the world is faced not so much with a choice between different kinds of future as a choice between a worthwhile future and a thoroughly impoverished one (Rackham, 1986).

The process of degradation of environment is widely regarded as something to be deplored. However, the people persist in taking decisions which then permit degradation to continue further. The nature conservation movement has largely failed in its broad objective of stemming the conservation of environment (Ratcliffe, 2002). Accordingly, some might argue that the increasing weight of human demands for the necessities of life make this process unavoidable, or at least unavoidable without the most almighty

and impracticable upheaval, and the possible abandoning of the liberal or democratic traditions. This is a possibility which has obvious implications for the task of conservation; for an initial understanding of conservation is to see it, precisely and simply, as the attempt to halt, and if possible reverse, the process of environmental degradation (Rawles, 2003).

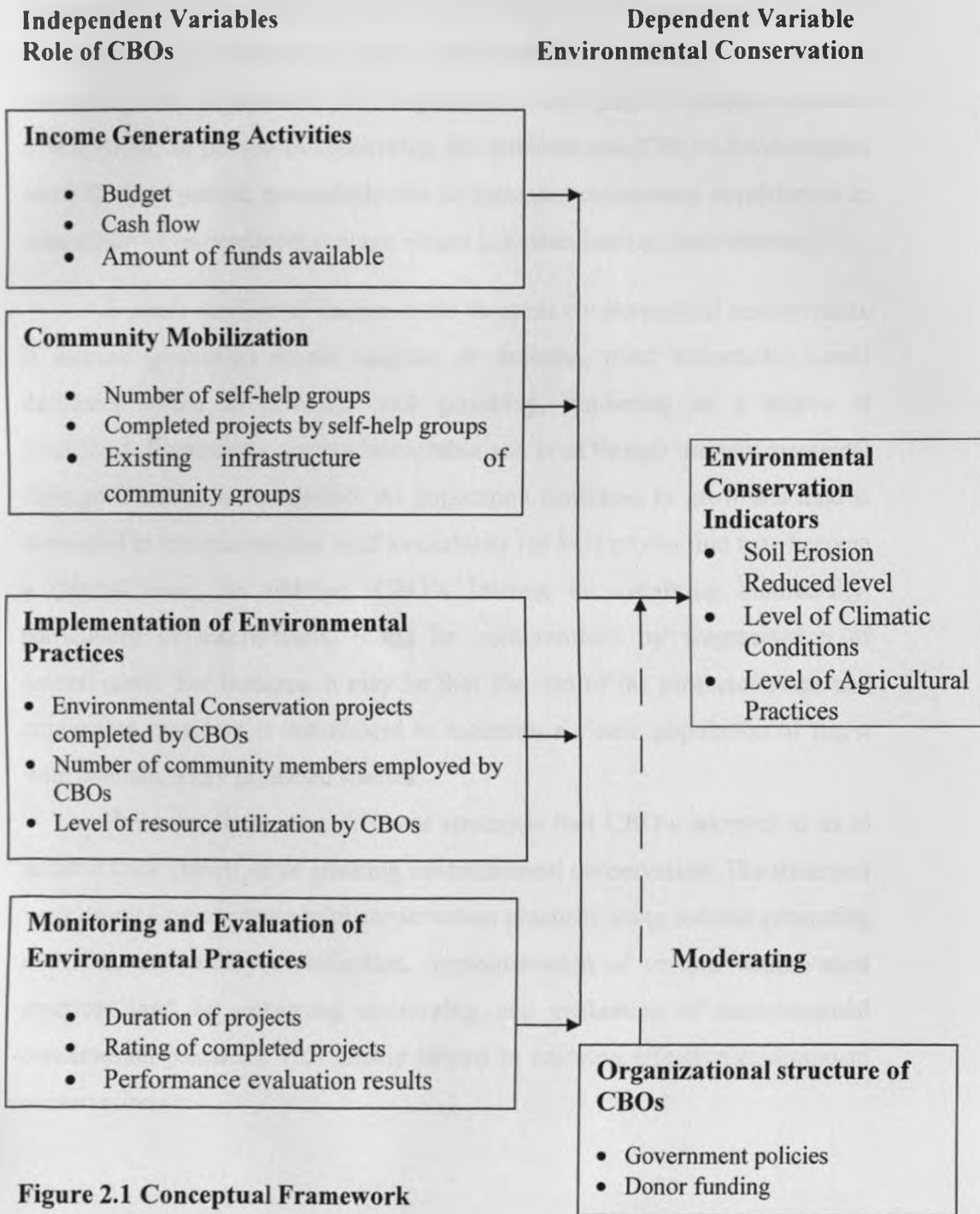
Whether the process is conceived as avoidable or unavoidable, however, depends upon what exactly environmental degradation is. If on hand it is supposed that any alteration of nature by humans amounts to degradation, then it is hard to imagine circumstances in which it might be reversed or even halted, however, if on the other hand degradation is taken to mean no more than a reduction in the flow of environmental resources, as understood in the concept of so-called 'resource conservation', then conservationists might hope to halt and reverse such a trend by, for example, improving conservation practices. This is the 'optimistic' view (Alan, 2003).

Neither of these ways of understanding the process of degradation, and the complementary task of conservation, however, seems satisfactory. Both are implicated in attitudes which lie at the root of the present predicament, the first by perpetuating the separation of human beings from nature, the second by perpetuating a wholly consumerist view of nature. They represent approaches to environment conservation which are each, in their way, uncompromising: the advancement of 'nature' at all costs; and the advancement of a 'culture' at all costs which views nature as mere raw material (Leopold, 2009).

In relation to the study, it is important to note that process of degradation of environment is avoidable. However, this depends upon taking good conservation measures. It is clear from the theory that, the human activities is the greatest threat to the environmental resources. Degraded environment can only be restored by stopping the nature human destruction. This is done actively through conservation implementation. However, Conservation has always had to reckon with both biological and cultural systems which are constantly changing. The challenge which it faces is

compounded; first, by recent institutional changes within the conservation movement itself, which require some delicate negotiation of the tensions between the claims of environment conservation and the charms of human degradation. More importantly still, global environmental changes, to a considerable degree the consequence of human activity, threaten to transform biological and cultural systems in ways, and at a pace, which are unprecedented within recent experience. If these factors present a challenge to the articulation and defense of environment conservation, they also underscore the urgency and importance of the task. The image of conservation has been too often a negative one. Understandably, those whose immediate interests are likely to be thwarted by conservationist objections will encourage and reinforce such an image. But perhaps too, conservationists themselves have been too willing to see their role in conserving the environment; it is to this effect the study shows then the roles of conservationists such as community based organizations in conservation of the environment.

## 2.6 Conceptual framework



**Figure 2.1 Conceptual Framework**  
 Source: Authors own compilation (2014)

The performance of CBO's in conservation of environment depends on how well these organizations respond to changes in the environment. Their effectiveness in conservation of the environment is dependent on the management and firm effects in the form of resource and the strategies

developed to attain a sustainable environment. Without further evidence, it can safely be concluded that CBO's interventions meet the test for environmental sustainability. New economic activities in which beneficiaries are engaged do not deplete the resource base and, to the extent they replace the need for conserving the ecosystem, they represent a net gain in natural resource conservation. In pursuit of conserving the environment, CBO's developments seem likely to persist, particularly due to increased community involvement in destruction of environment through illegal activities such as deforestation.

A small number of factors could threaten environmental conservation. If income generation should stagnate or decrease, most households would definitely return to activities such poaching, lumbering as a source of livelihood. It remains a socially acceptable act, even though the environmental damage it causes is recognized. As population continues to grow and land is converted to tree plantations, land availability for food production may become a critical issue. In addition, CBO's interest in sustaining biodiversity, particularly of macro-fauna, might be compromised by fragmentation of natural areas. For instance, it may be that the size of the protected areas and connecting corridors is insufficient to maintain a viable population of forest wild animals, a key protected species.

However, there were different strategies that CBO's adopted so as to achieve their objectives of ensuring environmental conservation. The strategies were promoting environmental conservation practices using income generating activities, community mobilization, implementation of various conservation practices, and by enhancing monitoring and evaluation of environmental conservation practices. This greatly helped in ensuring effective environment conservation.

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter presented detailed description of the research design and a description of the method applied in carrying out the research study. It outlined the procedure used to gather data that is: study area, research design, population and sampling technique, the research instrument, data collection and data analysis procedure

#### 3.2 Research Design

A research design is considered as a scheme for research, dealing with at least four problems that are in relation to the study case, that is, which questions to study, what data to collect, which data is relevant and how to analyze the results. The best design normally depends on the research questions and also the orientation of the researcher (Robson, 2003). In this research study, a descriptive survey study was the appropriate research design to be used. A survey study is a study of a certain situation rather than a wide-spread statistics. It is a method used to narrow down a very wider field of research into an easily researchable topic. This design was suitable to be used because of the large area of interest of the study i.e. Kapcherop Division.

#### 3.3 Target population

Target population refers to the entire group of individuals or objects to which researchers are interested in generalizing the conclusions. The target population usually has varying characteristics and it is also known as the theoretical population. The target population for a study is the entire set of units for which the data are to be used to make inferences. Thus, the target population defines those units for which the findings of the survey are meant to generalize. Establishing study objectives is the first step in designing a survey. Target populations must be specifically defined, as the definition determines whether sampled cases are eligible or ineligible for the survey. The geographic and temporal characteristics of the target population need to be defined. The study area had 8 well established community based organization responsible for conservation of environment. This study targeted 5 community based

organizations and 5 environmental experts in Kapcherop division. The researcher therefore targeted a total of 217 respondents which comprised of 212 respondents from the selected CBO's and 5 environmental experts in Kapcherop division.

**Table 3.1 Target Population of Respondents**

<b>Category</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
Koisungur	72	30	102
Chebororwa segemiat	18	7	25
Koitugum	8	22	30
Sugutek	9	16	25
Kuseruo	17	13	30
Environmental Experts	3	2	5
<b>Total</b>	<b>127</b>	<b>90</b>	<b>217</b>

Source: Kapcherop Divisional Office (2014)

### 3.4 Sampling procedure and sample size

Sampling procedure refers to a technique of selecting a part of population on which research can be conducted, which ensures that conclusions from the study can be generalized to the entire population. While sample in a research study refers to any group on which information is obtained. The researcher used a stratified sampling technique to select the respondents. The researcher selected the sample size from the target population of 217 respondents. The researcher obtained the sample size using the Mugenda and Mugenda (2003) formulae for a target population of less than 10,000. It was systematically computed as follows;

$$n_f = \frac{n}{(1 + n/N)}$$

Where;



nf = Sample size (when the population is less than 10,000).

n = Sample size (when the population is more than 10,000); 384

N = Estimate of the population size; 217

Therefore the sample size for this study was calculated as follows;

$$\begin{aligned}nf &= \frac{384}{1 + \frac{384}{217}} \\ &= 140\end{aligned}$$

This study will thus sample 140 respondents

**Table 3.2 Sample of the Respondents**

<b>Category</b>	<b>Population</b>	<b>Sample</b>	<b>Percent</b>
Community Based	212	136	62.6%
Organizations			
Environmental	5	4	1.85%
Experts			
<b>Total</b>	<b>217</b>	<b>140</b>	<b>64.5%</b>

Source: Kapcherop Divisional Office (2014)

### **3.5. Data collection instruments**

This study employed the use of both the questionnaires and interview schedule as the main data collection tools

#### **3.5.1 Questionnaires**

This tool was developed by the researcher with the aid of the supervisor. The study preferred this tool because is made use of large sample over a short period of time. This tool contain both open and closed ended question. Closed ended question is easy to analyze since they are in immediate usable form, easy to administer because each item is followed by alternative answer and are economical in the term of time and money. Open-ended question stimulate a person to think about his/her feeling or motives and to express what he/she consider most vital. The questionnaires were administered to the community residents.

### **3.5.2 Interview schedule**

This is a method of collecting data that involve presentation of oral verbal stimuli and reply in term of oral verbal responses (Kothari, 2003). The study employed the respondent- type of interview schedule where the interviewer retained all control throughout the process. The researcher used the interview schedule for guidance during the interview process. The interview schedule design was meant for the Environmental experts. It enabled the researcher to collect the information based on the objective of the study and balance between quality and quantity of data collected and also more information that cannot be directly observed or is difficult to put down in writing.

### **3.6 Validity and Reliability of research instruments**

It is recommended that prior to formulating the questionnaire and the interview schedules, the researcher has to reflect on the aim and objective of the study .This enabled the researcher formulate questions which result in accurate responses

#### **3.6.1 Validity of research instruments**

Validity is the accuracy and meaningfulness of inferences, which are based on the research results. It is the degree to which results obtained from the analysis of data actually represent the phenomenon under study (Mugenda & Mugenda, 2009). Validity answers the question ‘are my findings true?’ (Kerlinger 1973).To test the content validity of instruments, the researcher discussed the instruments with experts and specialists in university of Nairobi to ensure that all the concepts investigated were measured. A pilot study was to aid in improving the validity of the instruments. Items were checked to ensure they accurately measure the concepts under study.

#### **3.6.2 The Reliability of research instruments**

To determine the reliability of the instruments, pre-testing through piloting was done in one environmental CBO in the region but not in the study. The reliability of the items was based on estimates of the variability among the responses to the items. The reliability coefficient was determined using Karl Pearson’s product moment correlation coefficient because the method is more

accurate as it determines the stability of the instrument. The instruments were re administered again to the same respondents after a period of two weeks and identification maintained. A reliability index (alpha) greater than or equal to 0.7 was considered to be high enough for the instrument to be used in the study.

### **3.7 Data collection procedures**

The researcher acquired a permit from the National Commission for Science, Technology, and Innovation to conduct the research. The researcher then sought permission from the CBO's in Kapcherop Division to administer the questionnaires to respondents, Forestry department and Ministry of Agriculture for interview schedules. The researcher distributed the questionnaires and collected them immediately after the exercise to ensure efficiency in collection of the data.

### **3.8 Data Analysis Procedure**

The data was collected and analyzed through descriptive and inferential statistics, where in descriptive statistics; tables, frequencies were used in interpreting the respondent's perception on issues in the questionnaires. Therefore, to answer the research question, after data has been collected and analyzed, it was presented using frequency and tables. The data collected for the purpose of study was adopted and coded for completeness and accuracy. Statistical package for social science (SPSS) program was used for data analysis and interpretation. The researcher used descriptive statistics to analyze the data into meaningful information that was used to make conclusions and recommendations. The descriptive statistics used measures of central tendency such as mean, median and mode to describe a group of subjects. The researcher used Pearson's correlation model of inferential statistics to test the relationship between variables.

### **3.9 Operational Definition of Variables**

To achieve the objectives of the study the researcher investigated the role of community based organizations in the conservation of the environment in Kenya. To achieve these objectives questionnaires were used each with specific questions for each objective, as illustrated in table 3.3 overleaf

**Table 3.3 Operational Definition of Variables**

Objective	Variables	Indicators	Measurement	Tools of analysis	Types of tools
To establish the role of CBOs in promoting environmental conservation using income generating activities in Kapcherop division, Elgeyo Marakwet	<b>Independent</b> Income generating activities	<ul style="list-style-type: none"> <li>• Budget</li> <li>• Cash flow</li> <li>• Amount of funds available</li> </ul>	Ordinal	Descriptive statistics. tables and pictures	Frequency distribution tables
To identify the role of CBOs in community mobilization towards environmental conservation in Kapcherop division, Elgeyo Marakwet County	<b>Independent</b> Community mobilization	<ul style="list-style-type: none"> <li>• Number of self-help groups</li> <li>• Completed projects by self-help groups</li> <li>• Existing infrastructure of community groups</li> </ul>	Ordinal	Descriptive statistics Tables and pictures	Frequency distribution tables
To establish the role of CBOs in the implementation of environmental conservation practices in Kapcherop division, Elgeyo Marakwet County	<b>Independent</b> Implementation of environmental conservation practices	<ul style="list-style-type: none"> <li>• Environmental Conservation projects completed by CBOs</li> <li>• Number of community members employed by CBOs</li> <li>• Level of resource</li> </ul>	Ordinal	Descriptive statistics. tables and pictures	Frequency distribution tables
To determine the role of CBOs in the monitoring and evaluation of environmental practices in Kapcherop division, Elgeyo Marakwet County	<b>Independent</b> Monitoring and evaluation of environmental practices	<ul style="list-style-type: none"> <li>• Duration of projects</li> <li>• Rating of completed projects</li> <li>• Performance evaluation results</li> </ul>	Ordinal	Descriptive statistics. tables and pictures	Frequency distribution tables

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**Dependent**  
Environmental  
conservation

- 
- 
- 

**Moderating  
factors**

Moderates both  
independent and  
dependent  
variables

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Soil Erosion Reduced level Level of Climatic conditions	Nominal	Descriptive statistics. tables and pictures	Frequency distribution tables
Level of Agricultural Practices	Nominal	Descriptive statistics. tables and pictures	Frequency distribution tables
<ul style="list-style-type: none"> <li>• Organizational structure of CBOs</li> <li>• Government policies</li> <li>• Donor funding</li> </ul>	Nominal	Descriptive statistics. tables and pictures	Frequency distribution tables

### **3.10 Ethical Considerations**

There are certain ethical protocols that were followed by the researcher. First, the researcher sought to solicit explicit consent from the respondents to ensure that their participation to the study was out of their own volition. The researcher ensured that the respondents were aware of the objectives of the research and their contribution to its completion. Another ethical measure that was exercised by the researcher was treating the respondents with respect and courtesy (Schutt 2009). This was done so that the respondents were at ease; to make them more likely to give candid responses to the questionnaire. The respondents were also informed that the responses that they gave was treated confidentially and used strictly for this study and for no other purposes. Additionally, there are other ethical measures which were to be followed during data analysis. To ensure the integrity of data, the researcher checked the accuracy of encoding of the responses so as to ensure that the statistics generated from the study are truthful and verifiable (Schutt, 2009).

## CHAPTER FOUR

### DATA ANALYSIS AND INTERPRETATION

#### 4.1 Introduction

The chapter presents the analysis, and interpretation of the data collected using questionnaires. The data collected was analyzed using SPSS program and the various responses were summarized by the use of tables which helped in the analysis of data which were then grouped according to the objectives of the study, which were: To establish the role of CBOs in promoting environmental conservation practices using income generating activities in Kapcherop division, Elgeyo Marakwet County, To identify the role of CBOs in community mobilization towards environmental conservation practices in Kapcherop division, Elgeyo Marakwet County, To establish the role of CBOs in the implementation of environmental conservation practices in Kapcherop division, Elgeyo Marakwet County and To determine the role of CBOs in the monitoring and evaluation of environmental conservation practices in Kapcherop division, Elgeyo Marakwet County. In addition the demographic information of the respondents is presented. A total of 140 respondents were involved in data collection

##### 4.1.1 Response Rate

The study yielded a response rate of 100% since out of 140 targeted respondents; the researcher was able to collect information from all of the respondents. This was because all the respondents were willing to participate in the study due to familiarity of the problem. Keeter (2006) states that any survey with a response rate of above 70% gives out a more reliable and accurate information as it manifests significant feedbacks.

##### 4.1.2 Reliability statistic

The study was found to be reliable and valid. This is based on the Cronbach's reliability index which was found to be 0.739.

#### 4.2 Demographic information of the respondents

The study through questionnaires sought to accomplish the demographic information of the respondents which included gender of the



respondents, age and educational level. The background information was meaningful to the study as it helped to understand the logic of the background factors of the various respondents. It laid a crucial basis on which the interpretation of the study was based. All the respondents were selected from the target area, which was Kapcherop Division, Elgeyo-Marakwet County.

#### 4.2.1 Gender of the Respondents

The study sought to find out the gender of the respondents in order to establish whether there was gender balance and to balance the views of both genders. The findings were as shown in table 4.1

**Table 4.1 Gender of the Respondents**

<b>Gender</b>	<b>Frequency</b>	<b>Percentage</b>
Male	92	67.6%
Female	44	32.4%
Total	136	100%

The study results showed that, out of the 136 respondents 92 of them representing 67.6% were male while 44(32.4%) were female. Consideration of gender was reliable in this study in order to get views from both sides which has great importance. Despite the disparity, the findings shows that there was no biasness in the research because all gender participated.

It is clear from the study findings (table 4.1) that majority of the respondents were male. This could likely be due to the cultural practices of the communities (Keiyo/Marakwet) in the study area which is patriarchal in nature. This patriarchal community gives more privileges to the male than the female hence, in any place the male were given the advantage of answering the questionnaires over the female.

#### 4.1.2 Response by Age

The study sought to find out the ages of the respondents which were illustrated in table 4.2 of the study

**Table 4.2 Response by age**

<b>Age range</b>	<b>Frequency</b>	<b>Percentage</b>
21-30 years	49	36%
31-40 years	53	38.9
41-40 years	23	16.9
Over 50 years	11	8.2%
<b>Total</b>	<b>136</b>	<b>100%</b>

The study findings revealed that out of 136 respondents, majority 53(39%) were aged between 31-40 years, followed by 49(36%) who were aged between 20-30 years and 23(16.9%) of the respondents were aged between 41-50 years. The least were 11(8.1%) who were above 50 years. The ages of respondents were relevant to the study since views from people of diverse age categories were obtained.

It is evident from the study findings (table 4.2) that a majority of the respondents were below 50 years of age representing the most productive age group of the community and who are most familiar with current affairs.

#### **4.1.2 Educational Level of Respondents**

The study established the educational level of the respondents. The findings were as presented in table 4.3

**Table 4.3 Educational Level of Respondents**

<b>Education level</b>	<b>Frequency</b>	<b>Percentage</b>
O-level	27	19.9%
Certificate	8	5.9%
Diploma	81	59.6%
Degree	20	14.6%
<b>Total</b>	<b>136</b>	<b>100%</b>

According to the study findings (table 4.3), 81 respondents representing 59.6% had Diploma level of education, 27(19.9%) had o-level of education, 20(14.6%) were of degree level of education and only 8(5.9%) were of certificate level. It was necessary to establish the education level of

the respondents because getting information from diverse knowledge in education was very vital for the study since respondents with different level of education have different perception on the involvement of C.B.O's in conservation of environment.

It was observed from the study findings that a majority of the respondents were well educated having acquired secondary education and above, therefore the researcher was mostly dealing with literate individuals. This could be for easy answering of questionnaires due to literacy level. Also the researcher's choice of respondents might have been triggered by the participation of people with post secondary education in development activities in the community hence their familiarity with the topic of research.

#### 4.2.5 Level of Experience of the respondents

The study sought to know the level of experience of the respondents working in various community based organizations in order to ascertain the level of understanding of the respondents in regards to environmental conservation. The findings were as illustrated in the table 4.4

**Table 4.4 Level of Experience of the respondents**

	<b>Frequency</b>	<b>Percentage</b>
Below 5 years	54	39.7%
6-10 years	33	24.3%
11-15 years	25	18.4%
Above 15 years	24	17.6%
<b>Total</b>	<b>136</b>	<b>100%</b>

The study findings from table 4.4 shows that that out of 136(100%) respondents who responded to the questionnaires, 54(39.7%) had working experience of less than five years, 33(24.3%) had 6-10yrs of experience, 25(18.4%) had between 11-15years and the least who were 24(17.6%) had over 15 years experience working with community based organizations.

It was observed from the study findings that majority of the respondents 54(39.7%) had a working experience of less than five years. This

can be attributed to the fact that most C.B.Os have been established in the recent past. Experience of the respondents was necessary to the study as it helped the researcher to collect credible information that was used to draw relevant conclusions and recommendation to the study.

#### **4.3 Specific Information based on the Objectives of the Study**

This section seeks to establish the opinions of the respondents in accordance to the specified objectives and has been summarized and presented in tabular form in each category

##### **4.3.1 The role of C.B.Os in promoting environmental conservation**

The study was guided by the first objective which sought to find out the role of C.B.Os in promoting environmental conservation. This analysis includes the views on the roles of C.B.Os on the various perspectives of conserving the environment. The findings were summarized and presented as in table 4.1

**KEY: SA- strongly Agree, A-agree, U-Undecided, D-Disagree, SD-Strongly Disagree, T –Total, F-Frequency**

**Table 4.5 The role of C.B.Os in promoting environmental conservation**

		SA	A	U	D	SD	T	MEAN
The CBOs have sufficient budgetary allocations for all income generating activities	F	31	49	12	44	0	13	3.5
	%	22.8	36	8.8	36	0	10	70%
People who earn a living from unsustainable environmental practices have been offered alternative ways to generate income	F	29	38	17	29	23	13	3.2
	%	21.9	27.	12.	21.	16.	10	64%
Sufficient funding for implementation of income generating activities is readily available	F	25	38	0	46	27	13	2.9
	%	18.4	27.	0	33.	19.	10	58%

According to the study finding from table 4.5, it was observed that a majority of respondents 70%(mean=3.5) agreed that CBOs have sufficient budgetary allocations for all income generating activities followed by 64%(mean=3.2) of the respondents who were of the opinion that people who earn a living from unsustainable environmental practices have been offered alternative ways to generate income. Further, the study reveals that 58 %(mean=2.9) of the respondents said that sufficient funding for implementation of income generating activities is readily available.

The study findings from table 4.5 revealed that the CBOs in Kapcherop Division, Elgeyo-Marakwet County have sufficient budgetary allocations for all income generating activities necessary for environmental conservation.

This is evident by 70% (mean=3.5) of the respondents who were in agreement with that. However, it was least accepted that sufficient funding for implementation of income generating activities is readily available for C.B.O's in the division. This could be attributed to unavailability of adequate funding by the government, donors such as World Bank and international organizations such UNEP. This agrees with Khanya, (2007) findings that unsustainable extraction of environmental resources in various regions without doubt can be addressed by availing alternative income generating activities. People who earn a living from the extraction of these resources can only stop such extraction if they have alternatives to generate income. Activities such as nurturing tree nurseries for afforestation of degraded areas and for sale can generate incomes to the group.

**Table 4.5.1 Roles of C.B.O's**

	Mean	Standard deviation
People offered alternative ways to get income	3.15	1.419
Presence of Self-help Groups Due to CBO Activity	3.60	1.207
People are Offered Alternative Ways of Earning a Living	3.74	1.368

More findings provide evidence the community based organizations in Kapcherop division provide people with alternative services in order to effectively conserve the environment as indicated by the study results that people are offered with ways of earning living(mean=3.74),presence of self-help groups due to C.B.O's activities (mean=3.60)and availability of alternative means of getting income (mean=3.15).This findings concurs with the findings again by Khanya (2007) which stated that for the above initiatives

to bear fruit however there is need for stakeholder cooperation, so that policy can match the realities on the ground and suit the objectives of biodiversity conservation as well as a balance between economy and ecology. The initiatives need to be low cost, and funding for implementation readily available. There is also need for awareness creation and educating the community on the need for conservation of nature, and thus the need for these interventions.

#### 4.3.2 Community Mobilization and Environmental Conservation

The study's second objective was to assess the influence of Community Mobilization on environmental conservation. The findings were analyzed and presented as in table 4.2

**Table 4.6 Community Mobilization and Environmental Conservation**

		SA	A	U	D	SD	T	MEAN
CBOs working in the area	F	57	35	17	22	4	136	3.9
focus on various aspects of conservation including educating local communities and awareness creation,	%	41.9	25.7	12.5	16.2	2.9	100	78%
There are many self help groups in the area as a result of CBO activity	F	34	57	5	36	4	136	3.6
	%	25	41.9	3.7	26.5	2.9	100	76%
Most of the developmental projects in the area are as a result of CBO initiatives through local cooperatives.	F	38	41	15	30	12	136	3.5
	%	27.9	30.1	11	22.1	8.8	100	70%

The findings from table 4.6 indicated that 78% of the respondents were of the opinion that CBOs working in the area focus on various aspects of

conservation including educating local communities and awareness creation, 76% of the them who responded said that there are many self help groups in the area as a result of CBO activity while 70% of the same respondents agreed with the fact that Most of the developmental projects in the area are as a result of CBO initiatives through local cooperatives.

**4.3.3 Implementation of Environmental Practices and Environmental Conservation**

The study’s third objective sought to establish role of CBOs in the implementation of environmental conservation practices in Kapcherop division, Elgeyo Marakwet County. Table 4.7 demonstrates C.B.O’s implementation practices towards environmental conservation.

**Table 4.7 Implementation of Environmental Practices and Environmental Conservation**

**KEY SA- strongly agree A-agree U-undecided D-disagree SD- strongly disagree-Total**

		SA	A	U	D	SD	T	MEAN
CBOs in the region have ensured that natural resources are utilized properly	F	58	33	2	37	6	136	3.7
	%	42.6	24.3	1.5	27.2	4.4	100	74%
Manufacturing and processing firms have been acutely susceptible to pressure from CBOs eager to challenge their environmental record	F	34	42	26	31	3	136	3.5
	%	25	30.9	19.1	22.8	2.2	100	70%
There are other government environmental conservation agencies in the region that are enough to advocate for environmental conservation	F	28	63	21	14	10	136	3.6
	%	20.6	46.3	15.4	10.3	7.4	100	72%



In table 4.7, the findings showed that a majority of the respondents 74%(mean=3.7) agreed with the fact that CBOs in the region have ensured that natural resources are utilized properly, 72%(mean=3.6)of them however, said that there are other government environmental conservation agencies in the region that are enough to advocate for environmental conservation a concern that is likely attributed to the reluctance of most of the C.B.O's in the region in ensuring the implementation of environmental practices. In addition, the study further found that some of the respondents 70% (mean=3.5) were of the opinion that manufacturing and processing firms have been acutely susceptible to pressure from CBOs eager to challenge their environmental record.

#### **4.3.4 M& E of Environmental Practices towards Environmental Conservation**

The study's fourth objective sought to establish the role of CBOs in the monitoring and evaluation of environmental conservation practices in Kapcherop division, Elgeyo Marakwet County. The findings were analyzed and tabulated as shown on table 4.8

**Table 4.8 M& E of Environmental Practices towards Environmental Conservation**

		SA	A	U	D	SD	T	MEAN
Projects in the area are poorly planned thus making them very difficult to monitor and evaluate	F	8	64	30	26	8	136	3.3
	%	5.9	47.1	22.1	19.1	5.9	100	66%
Through effective monitoring and evaluation, a continuous and purposeful learning that feeds into the system as well as increase the capacity of the environmental conservation players to fulfill their mandate has been achieved	F	34	65	23	14	0	136	3.9
	%	25	47	16.9	10.3	0	100	78%
The proposed monitoring and evaluation protocols are practical and implementable by all stakeholders and result in the consistent collection, reporting, and management of relevant data that allows for the assessment and documentation of implementation performance	F	30	46	27	14	19	136	3.4
	%	22.1	33.8	19.9	10.3	14	100	68%

The findings indicated that through effective monitoring and evaluation, a continuous and purposeful learning that feeds into the system as well as increase the capacity of the environmental conservation players to fulfill their mandate has been achieved as represented by 78% of respondents who were in agreement with it. Also, the study findings showed that 68% of

the respondents were of the opinion that the proposed monitoring and evaluation protocols in the region are practical and implementable by all stakeholders and result in the consistent collection, reporting, and management of relevant data that allows for the assessment and documentation of implementation performance. In addition, the study findings revealed further that 66% of the respondents (CBOs) said that projects in the area are poorly planned thus making them very difficult to monitor and evaluate.

**4.4 Indicators of environmental conservation**

The study’s dependent variable was environmental conservation and the findings based on this were revealed on table 4.9. The study therefore sought to find out the indicators of environmental conservation as shown in the table below.

**Table 4.9 Indicators of Environmental conservation**

		SA	A	U	D	SD	T	MEAN
Most parts of Kapcherop Division experience serious soil erosion that has been caused by destruction of environment by the local communities	F	50	55	4	28	2	136	3.9
	%	36.8	40.4	2.9	18.4	1.5	100	78%
There is high variability of climatic conditions caused by deforestation practices	F	47	64	6	19	0	136	4.0
	%	43.5	47.1	4.4	14	0	100	80%
Due to high agricultural practices in the area, people have encroached towards forest land hence leading to high rate of forest destruction in the region	F	74	26	16	14	6	136	4.1
	%	54.4	19.1	11.8	10.3	4.4	100	82%

#### 4.4 Correlation Statistics

The study investigated linear relationship between variables as revealed in the table 4.10 below. Pearson correlation results in table 4.5 showed that Monitoring and Evaluation (M&E) practices were most highly negatively and significantly correlated to income community mobilization ( $r=0.506$ ,  $p<0.05$ ). Thus Monitoring and Evaluation (M&E) practices had 50.6% negative relationship with community mobilization.

Community mobilization was the most highly positively and significantly correlated to income generation practices ( $r=0.868$ ,  $p<0.05$ ). This shows therefore that community mobilization had 86.8% positive relationship with income generation activities.

Implementation of environmental practices was also positively and significantly correlated to income generation activities ( $r=0.629$ ,  $p<0.05$ ) and community mobilization ( $r=0.641$ ,  $p<0.05$ ). This reveals that implementation of environmental practices had 62.9% positive relationship with income generation activities and 64.1% positive relationship with community mobilization. This was therefore interpreted to mean that for effective implementation of environmental practices; proper community mobilization must be ensured as well as educating the community on other alternative ways of income generation.

Monitoring and Evaluation (M&E) practices was also found to have a positive and significantly correlated to implementation of environmental practices ( $r=0.376$ ,  $p<0.05$ ). This shows that Monitoring and Evaluation (M&E) practices had 37.6% positive relationship with implementation of environmental practices.

Findings provided enough evidence to suggest that there was linear relationship between income generation activities, community mobilization, implementation of environmental practices and Monitoring and Evaluation (M&E) practices and environmental conservation.

#### Table 4.10 Correlation Statistics

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	Income Generation Activities	Community Mobilization	Implementation of Environmental Practices	M& E of Environment al Practices
Income Generation Activities	1			
Community Mobilization	.868**	1		
Implementation of Environmental Practices	.629**	.641*	1	
M& E of Environmental Practices	-.435**	-.506**	.376**	1

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\*\* Correlation significant at the 0.01 level (2-tailed)

## CHAPTER FIVE

### SUMMARY OF FINDINGS, DISCUSSION, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents the summary of findings, discussion, conclusion, recommendations and suggestions for further research. This study was carried out with the main purpose of finding out the roles played by community based organizations in conservation of the environment in Kapcherop division Elgeyo Marakwet County.

#### 5.2 Summary of the Findings

The main objective was to investigate the roles played by community based organizations in conservation of the environment in Kapcherop division Elgeyo Marakwet County. To achieve the objectives of the study, primary data was collected by use of self-administered pre-determined questionnaires. This section presents the summary of the study findings. This section presents the summary of findings of the study in comparison to what other scholars have said about the roles of community based organizations in conservation of the environment.

As noted in the previous chapter, CBOs in Kapcherop division are engaging themselves in environmental issues and they play a vital role in conserving the environment through community education programs, provision of alternative ways of income, supporting individuals with programs that conserve the environment. According to the study finding from table 4.5, it was observed that a majority of respondents 70%(mean=3.5) agreed that CBOs have sufficient budgetary allocations for all income generating activities followed by 64%(mean=3.2) of the respondents who were of the opinion that people who earn a living from unsustainable environmental practices have been offered alternative ways to generate income. Further, the study reveals that 58% (mean=2.9) of the respondents said that sufficient funding for implementation of income generating activities is readily available.

The study findings from table 4.5 revealed that the CBOs in Kapcherop Division, Elgeyo-Marakwet County have sufficient budgetary allocations for all income generating activities necessary for environmental conservation. This is evident by 70% (mean=3.5) of the respondents who were in agreement with that. However, it was least accepted that sufficient funding for implementation of income generating activities is readily available for C.B.O's in the division. This could be attributed to unavailability of adequate funding by the government, donors such as World Bank and international organizations such UNEP.

More findings provide evidence that the community based organizations in Kapcherop division provide people with alternative services in order to effectively conserve the environment as indicated by the study results that people are offered with ways of earning living(mean=3.74),presence of self-help groups due to C.B.O's activities (mean=3.60)and availability of alternative means of getting income (mean=3.15).This findings concurs with the findings again by Khanya (2007) which stated that for the above initiatives to bear fruit however there is need for stakeholder cooperation, so that policy can match the realities on the ground and suit the objectives of biodiversity conservation as well as a balance between economy and ecology

The findings from table 4.6 indicated that 78% of the respondents were of the opinion that CBOs working in the area focus on various aspects of conservation including educating local communities and awareness creation, 76% of the them who responded said that there are many self help groups in the area as a result of CBO activity while 70% of the same respondents agreed with the fact that Most of the developmental projects in the area are as a result of CBO initiatives through local cooperatives.

These findings were found to relate to the study findings by Civil Society of Kenya, (2012) in that properly mobilized citizens can influence decisions made in society in many ways: They can vote in elections, join political parties and support all kinds of campaigns. However, their money

also gives them power to demand for effective conservation of the environment

It was observed from the study findings on table 4.6 that a majority of the respondents 78% (mean=3.9) were of the opinion that CBOs working in the area focus on various aspects of conservation including educating local communities and awareness creation. This relates to the findings by Alice (2005) in that CBO responsible for environmental conservation have in the recent past asked ordinary people to get involved in environmental activities

The study further established from the findings on table 4.6 that a majority of the respondents strongly agreed that CBOs in the region have ensured that natural resources are utilized properly. This could likely be due to the reason that most of these community based organization are established with their main mandate of properly utilizing and conserving the readily available environmental resources. Most of these organizations therefore work collectively in order to realize their objectives of conserving the environment.

Finally, the study findings further indicated that through effective monitoring and evaluation, a continuous and purposeful learning that feeds into the system as well as increase the capacity of the environmental conservation players to fulfill their mandate has been achieved as represented by 78% of respondents who were in agreement with it. Also, the study findings showed that 68% of the respondents were of the opinion that the proposed monitoring and evaluation protocols in the region are practical and implementable by all stakeholders and result in the consistent collection, reporting, and management of relevant data that allows for the assessment and documentation of implementation performance. In addition, the study findings revealed further that 66% of the respondents (CBOs) said that projects in the area are poorly planned thus making them very difficult to monitor and evaluate.

The study investigated linear relationship between variables as revealed in the table 4.6. Pearson correlation results in table 4.8 showed that Monitoring and Evaluation (M&E) practices were most highly negatively and



significantly correlated to income community mobilization ( $r=0.506$ ,  $p<0.05$ ). Community mobilization was the most highly positively and significantly correlated to income generation practices ( $r=0.868$ ,  $p<0.05$ ).

Implementation of environmental practices was also positively and significantly correlated to income generation activities ( $r=0.629$ ,  $p<0.05$ ) and community mobilization ( $r=0.641$ ,  $p<0.05$ ). Monitoring and Evaluation (M&E) practices was also found to have a positive and significantly correlated to implementation of environmental practices ( $r=0.376$ ,  $p<0.05$ ). Finally, the study findings provided enough evidence to suggest that there was linear relationship between income generation activities, community mobilization, implementation of environmental practices and Monitoring and Evaluation (M&E) practices and environmental conservation as indicated by the Pearson correlation statistics obtained by the study.

### **5.3 Discussion of the Findings**

#### **5.3.1 The role of CBOs in Promoting environmental conservation**

The study findings from table 4.5 revealed that the CBOs in Kapcherop Division, Elgeyo-Marakwet County have sufficient budgetary allocations for all income generating activities necessary for environmental conservation. This is evident by 70% (mean=3.5) of the respondents who were in agreement with that. However, it was least accepted that sufficient funding for implementation of income generating activities is readily available for C.B.O's in the division. This could be attributed to unavailability of adequate funding by the government, donors such as World Bank and international organizations such UNEP. This agrees with Khanya, (2007) findings that unsustainable extraction of environmental resources in various regions without doubt can be addressed by availing alternative income generating activities. People who earn a living from the extraction of these resources can only stop such extraction if they have alternatives to generate income. Activities such as nurturing tree nurseries for afforestation of degraded areas and for sale can generate incomes to this group

In addition, more findings provide evidence that the community based organizations in Kapcherop division provide people with alternative services in order to effectively conserve the environment as indicated by the study results that people are offered with ways of earning living (mean=3.74), presence of self-help groups due to C.B.O's activities (mean=3.60) and availability of alternative means of getting income (mean=3.15). These findings concurs with the findings again by Khanya (2007) which stated that for the above initiatives to bear fruit however there is need for stakeholder cooperation, so that policy can match the realities on the ground and suit the objectives of biodiversity conservation as well as a balance between economy and ecology. The initiatives need to be low cost, and funding for implementation readily available. There is also need for awareness creation and educating the community on the need for conservation of nature, and thus the need for these interventions

### **5.3.2 Community Mobilization and Environmental conservation**

It was observed from the study findings (see table 4.6) that a majority of the respondents 78% (mean=3.9) were of the opinion that CBOs working in the area focus on various aspects of conservation including educating local communities and awareness creation. This relates to the findings by Alice (2005) in that CBO responsible for environmental conservation have in the recent past asked ordinary people to get involved in environmental activities. While the environmental movement has traditionally been exclusive, mainly involving people with a high level of competence, commitment and involvement, the CBOs aim at being inclusive. The movement aims to mobilize those who have the will to contribute towards a better environment, but do not feel that they have the knowledge or skills to become activists.

The findings also relates to the study findings by Civil Society of Kenya, (2012) in that properly mobilized citizens can influence decisions made in society in many ways: They can vote in elections, join political parties and support all kinds of campaigns. However, their money also gives them power. Money can be used as a more generalized form of the ballot. Every penny spent in the shops is a 'vote' for a particular producer and a particular

product. This gives them the right and the market power, to make demands regarding the environmental quality of products. With such mobilization of the local citizens towards environmental conservation ensures that effective protection and conservation of the ecosystem is effectively achieved.

### **5.3.3 Implementation of Environmental Practice and Conservation**

The study therefore established from the findings on table 4.7 that a majority of the respondents strongly agreed that CBOs in the region have ensured that natural resources are utilized properly. This could likely be due to the reason that most of these community based organization are established with their main mandate of properly utilizing and conserving the readily available environmental resources. Most of these organizations therefore work collectively in order to realize their objectives of conserving the environment.

The findings on this concurs with earlier findings done by Turner (2001) which showed CBOs have played a major role in pushing for sustainable development at the international level. Campaigning groups have been key drivers of inter-governmental negotiations, ranging from the regulation of hazardous wastes to a global ban on land mines and the elimination of slavery. But CBOs are not only focusing their energies on governments and inter-governmental processes. With the retreat of the state from a number of public functions and regulatory activities, CBOs have begun to fix their sights on powerful corporations - many of which can rival entire nations in terms of their resources and influence. Aided by advances in information and communications technology, CBOs have helped to focus attention on the social and environmental externalities of business activity. Multinational brands have been acutely susceptible to pressure from activists and from CBOs eager to challenge a company's labor, environmental or human rights record. Even those businesses that do not specialize in highly visible branded goods are feeling the pressure, as campaigners develop techniques to target downstream customers and shareholders.

Holden and Mason, (2005) while conducting a research on the roles of community based organizations in conservation of environment argued that

CBOs play a vital role in the shaping and implementation of sound environmental practices and that their credibility lies in the responsible and constructive role they play in society. Holden and Mason however, suggested that formal and informal organizations, as well as grass-roots movements such as C.B.O's, should be recognized as partners in the implementation of sound environmental practices. The nature of the independent role played by CBOs within a society calls for real participation; therefore, independence is a major attribute of CBOs and is the precondition of real participation. One of the major challenges facing the world community as it seeks to replace unsustainable development patterns with environmentally sound and sustainable development is the need to activate a sense of common purpose on behalf of all sectors of society. The chances of forging such a sense of purpose will depend on the willingness of all sectors to participate in genuine social partnership and dialogue, while recognizing the independent roles, responsibilities and special capacities of each. These findings by Holden and Mason (2005) are however inconsistent with the study findings as evident by 70% (mean=3.5) of the respondents who were of the opinion that manufacturing and processing firms have been acutely susceptible to pressure from CBOs eager to challenge their environmental record. Thus this hinders most the established community based organizations in the region in enhancing proper implementation of environmental practices.

#### **5.3.4 M&E of Environmental practices towards Environment conservation**

It was clear from the findings based on monitoring and evaluation practices towards environmental conservation, (see table 4.8) that a majority of the respondents supported the statement that through effective monitoring and evaluation, a continuous and purposeful learning that feeds into the system as well as increase the capacity of the environmental conservation players to fulfill their mandate has been achieved. This will help the CBOs to effectively carry out the evaluation and monitoring practices more effectively. On contrary, the CBOs in Kapcherop division expressed some concerns that most of the projects in the area are poorly planned thus making them very difficult to monitor and evaluate. This therefore calls for proper planning of the

projects geared towards environmental conservation for ease of monitoring and evaluation of such projects.

The findings based on this objective relates to the literature by Gibbon, H ( 2004) which found out that if a project is poorly planned it is very difficult to monitor and evaluate. Very often M&E specialists find themselves having to go back to basic planning principles before they can assist with M&E. Hence the attention should also be given to planning as part of M&E.

Gibbon (2004) in addition added that in order to generate reliable and adequate information to support decision-making, the CBOs will need to develop and implement a sector-wide Research and Development strategy in collaboration with the country's public and private research institutions. Increased investment in sustainability science and technologies that link directly to the sustainable infrastructure program are required. Areas requiring more attention include: building materials, transportation, energy systems, sewage treatment, water efficiency systems, waste, food production, and how to use incentives and disincentives to dematerialize urban systems. He further alleged that improved monitoring and verification will ensure that public money is spent effectively and will provide valuable knowledge about the effectiveness of conservation-based techniques to achieve environmental improvements and benefits. Therefore also suggest that improved monitoring and evaluation must be enhance as this will not only ensure that public money is effectively spent but also ensures that projects geared towards environmental conservation are properly planned for good realization of conservation of the environment.

### **5.3.5 Indicators of environmental conservation**

The findings on the indicators of environmental conservation tabulated on table 4.9 showed that due to high agricultural practices in the area, people have encroached towards forest land hence leading to high rate of forest destruction in the region as evidenced by 82%(mean=4.1) of the respondents who were in agreement with this statement. The study also showed that 80% (mean=4.0) of the respondents said that in Kapcherop division there is high variability of climatic conditions caused by deforestation practices and that

most parts of Kapcherop Division experience serious soil erosion that has been caused by destruction of environment by the local communities as indicated by 78% (mean=3.9) of the respondents who were in agreement.

These findings indicated that there is serious environmental destruction in Kapcherop Division. This is what prompted the researcher to carry out the study. The interview schedule by environmental experts in Kapcherop division also indicated that in the area is prone to serious environmental degradation due to high human encroachment into forest areas. Majority of them also showed that the community based organizations already established in the area are faced with numerous challenges such lack of funds, Poor procedures used in conservation of environment and Lack of support from the local community

#### **5.4 Conclusion of the Study**

Based on the study findings, the researcher concluded that CBOs in Kapcherop Division Elgeyo Marakwet County play a vital role in conservation of the environment. As one of their mandate, CBO'S in the division have enhanced environmental conservation through their devoted strategy of co-management or mutual management of environmental resources by involving the local people to participate effectively in ensuring conservation implementation practices,

The study findings revealed that the CBOs in Kapcherop Division, Elgeyo-Marakwet County have sufficient budgetary allocations for all income generating activities necessary for environmental conservation. This has helped the CBOs in Kapcherop to focus on various aspects of conservation including educating local communities, awareness creation, conservation and research.

The study also concluded that CBOs in the division have managed to mobilize the local community in conservation of the environment. This was evident by the findings from table 4.7 which indicated that 78% of the respondents were of the opinion that CBOs working in the area have focus on various aspects of conservation including educating local communities and awareness creation through community mobilization.

Based on the study findings on table 4.8, the researcher concluded further that there is no effective monitoring and evaluation by CBOs in the division this is evident by the majority of the respondents, 78% (mean=3.9) who were in agreement with it. This is necessary as proper monitoring and evaluation will ensure a continuous and purposeful learning that feeds into the system as well as increase the capacity of the environmental conservation players to fulfill their mandate has been achieved. This will help the CBOs to effectively carry out the evaluation and monitoring practices more effectively.

The study finally concluded that there is linear relationship between income generation activities, community mobilization, implementation of environmental practices and Monitoring and Evaluation (M&E) practices and environmental conservation as indicated by the study findings on table 4.10.

## **5.5 Recommendations**

### **5.5.1 Recommendation for all objectives**

Monitoring and supervision of CBOs so as not to comprise the environmental conservation should be ensured. The county environmental secretary should be empowered to strengthen monitoring of community based organizations, local leaders and individuals who are participating in conservation of environment. CBO leaders should ensure that their employees are effectively equipped with skills for effective conservation of environment. The environmental expert as well need to ensure that CBOs and any other stakeholder participating in conservation of environment are well managed and monitored so as to realize the main objective of conserving the environment

For effective promotion of environmental conservation, CBOs should be funded properly and provided with maximum support in order to carry out their conservation more efficiently. The communities as well need to be educated on the importance of conserving the environment.

The community should be well mobilized through rallies, public gathering, and environmental conservation seminars as this will help them understand the importance of having a well conserved environment. The

individuals supporting conservation of the environment should be encouraged and supported where necessary

Proper planning should be enhanced on the projects for ease of monitoring and evaluation by the community based organizations. Effective and proper planning is necessary to achieve good implementation of environmental practices.

Government authorities should work with CBOs and other non-governmental organization such as USAID to sensitize the local people on importance of conserving the environment and the need for regular monitoring of the ecosystem. CBOs should organize meetings and door-to-door visits within the community to discuss ways to conserve the environment.

#### **5.6 Suggestion for further Studies**

The study investigated the CBOs only, it is therefore necessary to extend the study and a similar study is conducted to the community leaders and local people in the community. Second, the study targeted only Kapcherop Division, thus future research should focus on other regions in the country so as achieve the development agendas in line with vision 2030 under equitable and sustainable environmental conservation for all ecosystems.



## 5.7 Contribution for the body of knowledge

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Objectives	Contribution
1. Promoting environmental conservation	Objective showed that CBOs in the study area play a vital role in conservation of the environment adding more literature on relationship between environment conservation and alternative ways of income generation
2. Community mobilization	Findings in objective two contributed to the existing literature of environment conservation by providing enough evidence that community mobilization was negatively related to Monitoring and Evaluation (M&E) practices but positively related to income generation activities.
3. Implementation of environmental practices	Few studies have tried to relate implementation of environmental practices with conservation of environment. This study however, has shown that CBOs need to ensure that implementation of environmental practices are done in an efficient way
4. M&E of environmental conservation	Literature review showed how monitoring and evaluation affects environmental conservation. This study only concentrated on the positive side of monitoring and evaluation on the other hand this study established that monitoring and Evaluation (M&E) practices was found to have a positive and significantly correlated to implementation of environmental practices

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## APPENDICES

### APPENDIX 1: LETTER TRANSMITTAL

Dear sir/madam.

I am conducting a research on "THE ROLE OF COMMUNITY BASED ORGANIZATIONS IN THE CONSERVATION OF THE ENVIRONMENT IN KENYA", as a requirement for the award of a Degree in Master of Arts in Project Planning and Management of the University of Nairobi. It should be clear therefore that the information given was treated with the highest level of confidentiality since this research is an academic exercise. The name of the institution or your name will not appear anywhere in the study as a source unless your permission or the institution's permission is sought for and granted.

Kindly answer the question below by either ticking and/or writing brief statements on the spaces provided.

Yours sincerely

Jeremiah Tangui

L50/61768/2013

## APPENDIX II: QUESTIONNAIRE FOR COMMUNITY BASED ORGANIZATION

### SECTION A: BACKGROUND INFORMATION

Kindly respond by ticking (√) where appropriate.

1. Questionnaire number .....

2. Current location .....

3. Tick to indicate your gender

Male

Female

4. Tick to indicate your age

20-30 years

31-40 years

41-50 years

Over 51 years

5. What is your level of education?

Diploma level

Degree level

Masters

O-level

None

Other specify.....

**6. Working experience**

Less than 5 years

Between 6-10 years

Between 11-15 years

Over 15 years



**SECTION B:**

Read these items carefully and indicate your choice to what you think is applicable to you by putting a tick (✓). The following numerals will stand for the following:

- 5- Strongly Agree
- 4- Agree
- 3- Undecided
- 2- Disagree
- 1- Strongly Disagree

1. To what extent do you agree with the following statements on the role of CBOs in promoting environmental conservation using income generating activities in Kapcherop division, Elgeyo Marakwet County

Statement	5	4	3	2	1
The CBOs have sufficient budgetary allocations for all income generating activities					
People who earn a living from unsustainable environmental practices have been offered alternative ways to generate income					
Sufficient funding for implementation of income generating activities is readily available					

2. To what extent do you agree with the following statements on the role of CBOs in community mobilization towards environmental conservation in Kapcherop division, Elgeyo Marakwet County

Statement	5	4	3	2	1
CBOs working in the area focus on various aspects of conservation including educating local communities and awareness creation.					
There are many self help groups in the area as a result of CBO activity					
Most of the developmental projects in the area are as a result of CBO initiatives through local cooperatives.					

3. To what extent do you agree with the following statements on the role of CBOs in the implementation of environmental conservation practices in Kapcherop division, Elgeyo Marakwet County

Statement	5	4	3	2	1
CBOs in the region have ensured that natural resources are utilized properly					
Manufacturing and processing firms have been acutely susceptible to pressure from CBOs eager to challenge their environmental record					
There are other government environmental conservation agencies in the region that are enough to advocate for environmental conservation					

4. To what extent do you agree with the following statements on the role of CBOs in the monitoring and evaluation of environmental practices in Kapcherop division, Elgeyo Marakwet County

Statement	5	4	3	2	1
Projects in the area are poorly planned thus making them very difficult to monitor and evaluate					
Through effective monitoring and evaluation, a continuous and purposeful learning that feeds into the system as well as increase the capacity of the environmental conservation players to fulfill their mandate has been achieved					
The proposed monitoring and evaluation protocols are practical and implementable by all stakeholders and result in the consistent collection, reporting, and management of relevant data that allows for the assessment and documentation of implementation performance					

5. To what extent do you agree with the following statements on the Indicators of environmental conservation in Kapcherop Division, Elgeyo Marakwet County?

Statement	5	4	3	2	1
Most parts of Kapcherop Division experience serious soil erosion that has been caused by destruction of environment by the local communities					
In Kapcherop division there is high variability of climatic conditions caused by deforestation practices					
Due to high agricultural practices in the area, people have encroached towards forest land hence leading to high rate of forest destruction in the region					

6. What role does your CBO play to create and enhance sustainability in the exploitation of natural resources and at the same time provide a means of livelihood to host communities; thereby ensuring a balance between economy and ecology?

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.....

7. Briefly explain the effectiveness your CBO's environmental management Action Plan in community mobilization through educating local communities and awareness creation in order to show them the right direction towards environmental conservation.

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8. Please explain how your CBO has helped to focus attention on campaigning for the broader stakeholder approach towards the implementation of environmentally sound and socially responsible sustainable development practices.

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

9. In which ways does your CBO ensure a continuous and purposeful learning (through monitoring and evaluation) that feeds into the system as well as increase the capacity of the environmental conservation players to fulfill their mandate?

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

10. What is the role of government in the conservation of environment?

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

11. In your own opinion what impact have the CBO's brought in the division in regards to conservation of environment?

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

12. What action does the government through the Ministry of environment, water and natural resource take on the destructors of forests?

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

13. Please describe the conservation projects that have been constructed or established by CBO's in the region?

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

14. What forms of conservation mechanisms are used by CBO's in conservation of environment?

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

Any other opinion?

.....  
.....

15. Briefly comment on the efficiency of non CBO community leaders in conservation of the environment.

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

16. Briefly explain some of the problems community leaders in the region face in conserving the environment?

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

17. To what extent do you agree on the following statements on the challenges faced by community leaders in conservation of environment in Kapcherop Division?

Statement	5	4	3	2	1
Lack of support by local communities					
Poor procedures used in conservation of environment					
Lack of funds required for conservation of environment					
Lack of motivation					

18. Does lack of implementation by community leaders exist that hinders the work of CBOs in conservation of environment?

If yes, briefly explain how

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

19. What are other possible strategies should stakeholders adopt in order for the effective conservation of environment to be realized?

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

20. What are the main reasons as to why community leaders like engaging themselves with the CBO's in the conservation of environment?

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

21. In your own opinion, what do you think are the major benefits of conserving the environment?

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



**APPENDIX III: INTERVIEW SCHEDULE FOR ENVIRONMENTAL EXPERTS**

1. GENDER\_\_\_\_\_

2. For how long have you worked in the environment sector?

\_\_\_\_\_

3. What role do CBOs play in promoting environmental conservation using income generating activities in Kapcherop division, Elgeyo Marakwet County?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. In what ways do CBOs assist in the implementation of environmental conservation practices in Kapcherop division, Elgeyo Marakwet County?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. How do CBOs aid in the monitoring and evaluation of environmental practices in Kapcherop division, Elgeyo Marakwet County?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. How is the rate of soil erosion in Kapcherop division?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. Does this region experience some variations of climatic conditions as contributed by destruction of environment?

\_\_\_\_\_  
\_\_\_\_\_

8. Do the various agricultural practices in the county conserve the environment?

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9. To what extent do farmers use organic fertilizers in Kapcherop Division?

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10. How do the Community Based Organizations utilize swamps and other wetlands in the area?

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11. What measures do the CBO's put in place in order to ensure protection and conservation of water sources such as Rivers in the area?

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12. What is the role played by CBOs in community mobilization towards environmental conservation in Kapcherop division, Elgeyo Marakwet County?

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## CONDITIONS

1. You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit
2. Government Officers will not be interviewed without prior appointment.
3. No questionnaire will be used unless it has been approved.
4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
5. You are required to submit at least two(2) hard copies and one(1) soft copy of your final report.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.



**REPUBLIC OF KENYA**



**National Commission for Science,  
Technology and Innovation**

**RESEARCH CLEARANCE  
PERMIT**

Serial No. A

**CONDITIONS: see back page**

**APPENDIX IV: RESEARCH PERMIT**

