

Role of Environmental Conservation in Poverty Alleviation: A Case Study of Malawi

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Degree of Masters of Laws (LLM)**

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DECLARATION

I, **APENDEZI KACHIWALA**, do hereby declare that this is my original work and that it has not been submitted and it is not being submitted for the award of a degree or any other academic credit in any other university.

Signed:

APENDEZI KACHIWALA

.....

DATE

This thesis has been submitted for examination with my approval as the University supervisor.

Signed:

Dr. KARIUKI MUIGUA

.....

DATE

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LIST OF CASES

1. Chihana v Republic
2. Henderson & Co v Williams
3. Mchima Tea and Tung Estates Co. Ltd v. Concerned Persons
4. Mabo v. Queensland
5. Wik v. Queensland
6. R v Thames Water Utilities

LIST OF STATUTES AND CONVENTIONS

1. The constitution of Malawi

Conventions

1. African Charter on Human and People's Rights
2. Convention for the Elimination of All Forms of Discrimination against Women
3. International Covenant on Economic, Social and Cultural Rights
4. Southern African Development Community (SADC) Charter of Fundamental Social Rights and Protocol on Health
5. United Nations Conference on Environment and Development
6. Universal Declaration of Human Rights

Statutes

1. Company's Act
2. Company's Act
3. Forest Act
4. National Environmental Act
5. Water Act

ABBREVIATIONS

CEDAW	Convention for the Elimination of All Forms of Discrimination against Women
CARLA	Climate Adaptation for Rural Livelihood and Agriculture
CPR	common pool resources
CBO	Community Based Organisation
CSR	Corporate Social Responsibility
EAP	Environmental Action Plan
EAD	Environmental Affairs Department
EIA	Environmental Impact Assessment
EMA	Environmental Management Authority
ICESCR	International Covenant on Economic, Social and Cultural Rights
JPOI	Johannesburg Plan of Implementation
MDG	Millennium Development Goal
MNREE	Ministry of Natural Resources, Energy and Environment
MDB	Multilateral Development Banks
NEAP	National environmental Action Plan
NEPAD-EAP	NEPAD Environmental Action Plan
NEPAD	New Partnership for Africa's Development
SSC-PoA	Small Scale Program of Activities
SADC	Southern African Development Community
UNDP	United Nations Development programme (UNDP)
UNEP	United Nations Environmental Program
WRI	World Resources Institute
ZBC	Zanzibar Butterfly Centre

The Role of Environmental Conservation in Poverty Alleviation: A Case Study of Malawi

ABSTRACT

Promoting health and economic stability ensures progress in improving lives. Improving health and economic stability through environmental conservation and development has proved its value in most Western countries. The growth in Western countries behooves developing countries like Malawi to create a strategic and long term policy on environment and development. This thesis assessed whether environmental conservation can be used as a tool of poverty alleviation in Malawi. Despite vast research by Malawians on the impact of the pursuit of development on the environment, little is known about its effect on the poor populace. In fact, questions abound whether environmental conservation, development and poverty alleviation can be pursued concurrently. The overall image that emerges from this research is undesirable: soil erosion, decreasing soil fertility, extreme climatic variations, sewerage pollution in urban areas, poaching, declining fish catches and altering the species composition, widespread poverty and decreasing trends in food and economic security are the salient features of Malawi's environmental conservation measures. An analysis of this trends reveals a weak legal and policy framework, poor corporate governance structures, lack of education, corruption, and poor governance as the causes of the challenges. This research is important because it instigates questioning of the necessity of sustainable development policies for poverty alleviation.

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CHAPTER ONE

GENERAL INTRODUCTION

The link between poverty alleviation and environmental conservation is very often ignored. Some commentators view the two as mutually exclusive and contradictory goals; while for others, the goals of poverty alleviation and environmental conservation are integrated and ought to be pursued concurrently. This study aims at addressing how development, poverty alleviation, and the environment are linked with a view of establishing that the two goals are mutually dependent.

1.1 Background

We are confronted with a perpetuation of disparities between and within nations, a worsening of poverty, hunger, ill health and illiteracy, and the continuing deterioration of the ecosystems on which we depend for our well-being. However, integration of environment and development concerns and greater attention to them will lead to the fulfillment of basic needs, improved living standards for all, better protected and managed ecosystems and a safer, more prosperous future.¹

The above excerpt suggests that the goals of environmental conservation and development, of which poverty alleviation forms a considerable part are closely related. Although considered to be separate and incompatible goals, environmental conservation and poverty alleviation through sustainable development has become the principal objective on policy makers in their quest to secure a viable future for all humanity.² This new relationship was cemented in the Rio de Janeiro Earth Summit, 1992³.

1 Paragraph 1.1 of the Preamble to Agenda 21, United Nations Conference on Environment & Development, Rio De Janeiro, Brazil, 3 to 14 June 1992.

2 Paolo Galizzi and Alena Herklotz (eds) "People and the Environment: The Role of the Environment in Poverty Alleviation", p. xxiv (Foreword)

3 United Nations Conference on Environment and Development (UNCED), Rio de Janeiro.

The discussions in the Conference were to a significant extent informed by the Brundtland Report of 1987⁴ which stated that “poverty is a major cause and effect of global environmental problems”.⁵

The link between poverty and the environment in Malawi is inexorable. Poverty is a cause and an effect of environmental degradation.⁶ The effect of the relationship is a vicious cycle where environmental degradation leads to poverty and poverty exacerbates environmental degradation.⁷ These trends are difficult to break or reverse its adverse effects.⁸

Agriculture is the mainstay of Malawi’s population accounting for 40% of the country’s GDP and employing about 85% of the labour force. In fact, agriculture accounts for 75% of Malawi’s foreign exchange earnings. However, Malawi’s population growth poses a threat to its reliance on agriculture. Malawi has a population of over 15 million people. The country’s average population density of about 105 people/km² makes it one of the most densely populated nations in Africa. Meanwhile, extreme pressure on the available agricultural land is hampering Malawi’s pursuit of sustainable development especially in the southern region, which averages 143 persons/km². Consequently, the more the country attempts to reap from environmental resources, the more environmental degradation is exacerbated hence increased poverty.

Despite the apparent convergence between the environment and poverty both geographically and at the international policy level, there is a significant variance of opinion at the practical level regarding the nature and scale of environment-poverty integration. One side of the divide argues that there is no single relationship between poverty alleviation and environmental conservation. The proponents contend that the causal link is so straightforward as to conclude that poverty causes environmental degradation, or environmental conservation results in poverty alleviation.

4 Report of the World Commission on Environment and Development: Our Common Future, 1987.

5 Craig Leisher, M. Sanjayan, Jill Blockhus (The Nature Conservancy); Andreas Kontoleon (Cambridge University); S. Neil Larsen (Consultant) eds. ‘ Does Conserving Environment Work to Reduce Poverty?’ in *Linking Environment Conservation and Poverty Alleviation: A State of Knowledge Review*, p.9.

6 Africa Environment Outlook 2: Our Environment our wealth (2006).

7 Michael Aliber, ‘Poverty Eradication and Sustainable Development’, Human Sciences Research Council.

8 Amechi (n6).

Conversely, other critics have highlighted the dazzling and context-specific characteristic of the poverty conservation link. They have pin-pointed essential determinants that emphasize how the two concepts are inter-related for instance governance, population density and growth, policies on environmental conservation and poverty eradication are clear indicators on whether environmental conservation has a resultant effect of poverty alleviation.⁹

It has been argued that the goals of environmental conservation and poverty alleviation cannot always be reconciled. For example, the establishment of protected areas¹⁰ often causes the foreclosure of future land use options, with economic opportunity costs such as the eviction of former occupiers or right holders in land or resources.¹¹ This way, the pursuit of one goal at the expense of the other may present an easier way out.

This paper agrees that the view that the environment provides a cheap and readily available cushion against poverty, especially food security, risks from environmental threats and health risks for the poor in Malawi. Conservation of the environment should, therefore, be a priority for policymakers to ensure the continued existence of a source of livelihood and a gradual improvement in the economic conditions of the poor.

1.2 Statement of the Problem

Poverty creates an urgent need for economic development in Malawi. In fact, the Millennium Declaration placed the eradication of poverty as the first Millennium Development Goal. The economic organization of poor people in Malawi revolves around their environment. The people draw a vast quantity of their resources directly from the environment, be it land, water or even forest resources. However, extreme poverty prevails in Malawi thereby creating an ever-present risk

9 Tekelenburg, Allison. How do biodiversity and poverty relate? An explorative study [2009] Netherlands Environmental Assessment Agency (PBL), Bilthoven, Netherlands.

10 International Union for Conservation of Nature defines a protected area as a clearly defined geographical space.

11 William. M. Adams 'Biodiversity Conservation and the Eradication of Poverty' [2004] Science Journal.

of unsustainable use of the environment, which would, in turn, render its dependents derelict. This forms a cyclic relationship between environmental degradation and poverty. As such, addressing one without the other would be of little or no help.

This has been recognized by world countries and has culminated in the call to all states to aim at balancing their economic goals with environmental sustainability. However, measures applied towards conservation often negate poverty alleviation. Preservation of forests in Malawi, for example, denies a vast majority of people an opportunity to carry out farming on the fertile pieces of land on which forests stand and wood fuel, which is the primary source of energy. This paper seeks to address the link between environmental conservation and poverty reduction and assess whether the two agendas can be pursued concurrently. It seeks to establish that a link exists and then proceed to answer the question of how the recognition of this connection can inform the development agenda of countries in the world.

1.3 Hypotheses

This research proceeds on the following hypotheses:

- a) That the poor depend primarily on the environment for their sustenance.
- b) That the goals of environmental conservation and poverty alleviation can be pursued and achieved simultaneously.
- c) That environmental conservation presents a viable means towards poverty alleviation and vice versa.

1.4 Main Objective

The general objective of this work is to properly define the relationship between environmental conservation and poverty alleviation using the case study of Malawi.

1.5 Specific Objectives

1. The specific objective of this study is to explore ways in which a balance between environmental conservation and poverty alleviation can be struck.
2. More specifically, the objective of this paper would be to explore ways in which poverty can be reduced through environmental conservation.

1.6 Research Questions

1. To what extent has environmental conservation reduced poverty in Malawi?
2. In what ways does the poor populace in Malawi depend on the environment?
3. To what extent has the legal and regulatory framework in Malawi reconciled the goals of environmental conservation and poverty alleviation?
4. Can environmental conservation be applied as a method of poverty reduction?

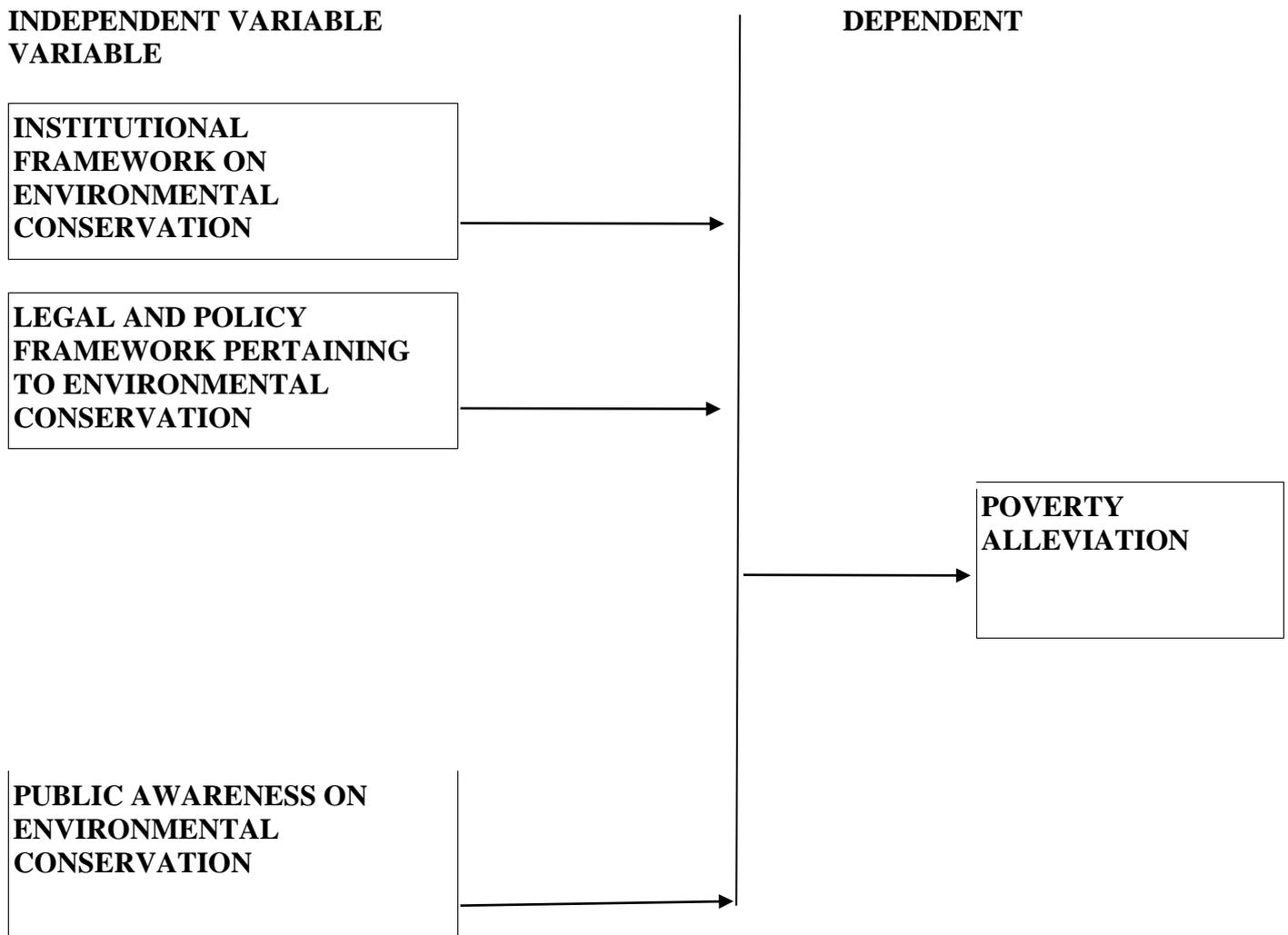
1.7 Research Methodology

Data used in this research shall be Secondary data. Secondary data is data that has already been collected by other parties and are available from secondary sources such as books, articles, journals, reviews and unpublished reports. The scope of the secondary data has been extensively reviewed and the work considered in this paper. Internet resources shall also be used as a source of reports, reviews and electronic documents. Secondary data was chosen because of time and financial constraints of collecting primary data. Moreover, the researcher noted that the secondary data available was sufficient to adequately answer the research questions.

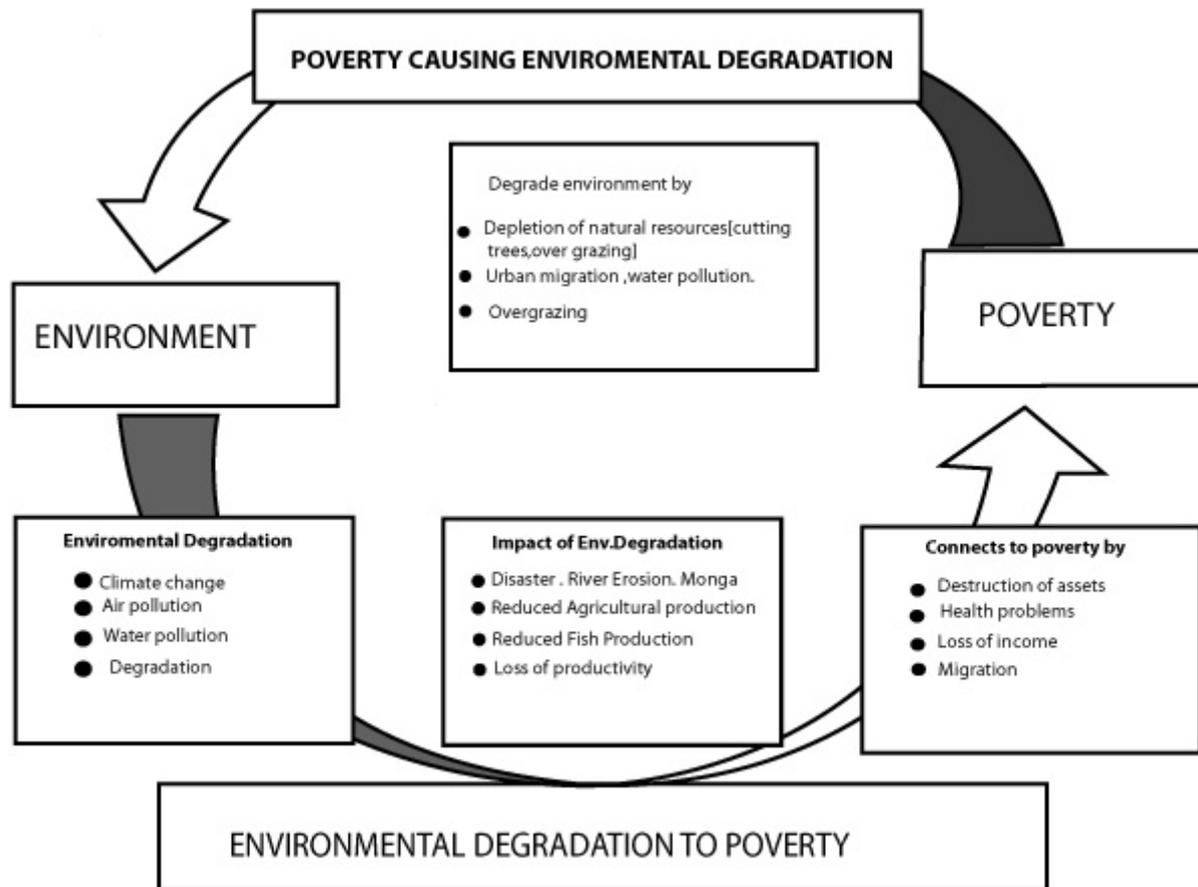
Malawi was selected as a case study because of the extent of environmental degradation. Malawi is heavily reliant on the environment for its energy demands with over 90% from wood and charcoal. As a result, forest cover has declined from 47% in 1975 to 26% in 2006. With an annual deforestation rate of between 2.8%-3.4%, the situation is bound to get worse.

1.8 Conceptual Framework

The conceptual framework below highlights how poverty alleviation (dependent variable) is influenced by a number of factors which form the independent variables in the study and they include; legal and policy framework pertaining to environmental protection, institutional framework on environmental conservation and public awareness on environmental conservation. However, the independent variable is influence by a moderating variable which determines the relationship between the two variable (dependent and independent variable). The moderating factors include economic growth of a country, budgetary considerations and public pressure especially where a malpractice has increased public scrutiny of environmental conservation.



The relationship between poverty and environmental conservation is best illustrated in the diagram above.



Source: Chondhury and Ahmed 2010

Environmental conservation is the protection, preservation, and careful management of natural resources and of natural environments and the ecological communities that inhabit them. An offshoot of the concept of environmental conservation is Pro-Poor Conservation. The poor populace rely primarily on biodiversity for diverse natural resources which are vital for their daily needs. Consequently, environmental degradation poses great risk on their survival. Actually, about 1.6 billion people worldwide depend on forest resources whereas 150 million people from poor households depend on wild game for their livelihood. This highlights the vital role played by the environment in poverty alleviation.¹²

A number of both practical and moral arguments have been put forward addressing the question of why environmental conservation ought to be linked with poverty alleviation. Firstly, it has been

¹²Dilys Roe and Joanna Elliott 'Pro-poor conservation: the elusive win-win for conservation and poverty reduction?'[2006] Policy Matters.

argued that investing in the environment plays a critical role in poverty alleviation. People rely on diverse environmental goods for example fuel, food, building materials and medicines. In addition, the environment plays other critical roles such as carbon sequestration, watersheds and aiding in ensuring soil fertility through composition of matter thereby forming humus. Consequently, people can reap from the environmental goods by engaging in income generation activities such as fishing, tourism, hunting wild game and forestry.¹³ Secondly, it has been argued that fixing poverty-related concerns results in heightened support for environmental conservation. Roe and Elliot have argued that although a weak land tenure system results especially among the poor people amplifies the potential for over-exploitation of natural resources by local population, which essentially leads to environmental degradation and consequently poverty, the high reliance of the poor populace on the environment increases their desire to conserve the environment and continue gaining from the environmental goods.

Thirdly, poverty reduction is an international imperative. The importance of biodiversity in supporting the livelihood of millions of people worldwide means that it should form part of the international agenda.¹⁴

The concept of pro-poor conservation is grounded on the fact that conservation is a vital tool not only poverty conservation, but also protecting critical habitats and endangered species. This is aptly emphasized by the case of “bushmeat in Africa”¹⁵ There is a crisis in African countries especially those located in tropical forests. Most conservation experts have highlighted the crisis presented by over-harvesting of wild game especially primates. The dwindling population of wild game is resulting in a looming crisis in the form of food shortage. If there is no sustainable management of “bushmeat” harvesting, the local populace will be really affected. Therefore, conservation of

13 Ibid.

14 Dilys, Roe (ed.) ‘Linking Environment Conservation and Poverty Alleviation: A State of Knowledge Review’(2010), CBD Technical Series No.55.

15 This was explored as one of the themes in the 2002 report by the UK Department for International Development (DFID) which conducted an examination of the linkages between wildlife and poverty and reviewed the scope for reducing poverty through wildlife-based interventions.

bushmeat species and sustainable management of its harvesting can safeguard the continued survival of those species and, at the same time, provide a continued source of local protein.¹⁶ Pro-poor conservation is therefore about ‘harnessing conservation in order to deliver on poverty reduction and social justice objectives’.¹⁷

It is the argument of this paper that pro-poor conservation is a pragmatic and moral way forward. Moreover, there is ample evidence that indicates that environmental conservation can result in poverty alleviation. For example, the CAMPFIRE programme in Malawi, established to ensure economic development of the poor populace in Zimbabwe has uplifted the lives of many poor people.¹⁸ In Tanzania, the Zanzibar Butterfly Centre (ZBC) and the proposed Manyara Butterfly Centre projects in Tanzania provide a good illustration.¹⁹ The ZBC was established in 2008 as a tourist attraction where visitors can watch butterflies in botanical gardens at the same time, enhancing the sustainable use of natural resources and providing extra income to local farmers.²⁰

1.9.Limitations and delimitations of the study

1.9.1. Limitations of the study

The study is influenced by many factors that are out of control of the researcher. The following limitations are identified due to their prominence in significantly influencing the outcome of this study.

1. The data is sourced from secondary sources and therefore, means that it carries the cumulative assumptions and limitations of the data collectors.

¹⁶ Roe and Elliott (n 14) at 57.

¹⁷ Ibid. at 58.

¹⁸ Ibid at 62. The acronym CAMPFIRE stands for Communal Areas Management Programme for Indigenous Resources.

¹⁹ See ‘Butterfly Farming for Pro Poor Tourism and Environment Conservation’, Executive Summary; accessed 21 November 2014.

²⁰ This solution won the SEED award, which is a component of the SEED Initiative, a global partnership for action on sustainable development and the green economy. Founded by UNEP, UNDP and IUCN at the 2002 World Summit on Sustainable Development in Johannesburg, SEED supports innovative small-scale and locally-driven entrepreneurs around the globe who integrate social and environmental benefits into their business model from the outset.

2. The study is influenced by the nature of self-reporting, such that the researcher's 'objectivity' is subjective to his view of what 'objective' reporting means.
3. Time constraints limited the researcher's ability to exploit different variations of analysis that the researcher feels will provide the best snapshot of the conditions being tested.
4. The analysis is limited by the assumptions made. This, however, enables the existence of a research problem to be put into perspective.
5. The research is limited to reconciling environmental conservation efforts in Malawi and its findings cannot be assumed to apply to other countries with the same economy or others.

1.9.2 Delimitations of the study

The study is characterised by the following delimitations.

1. The study will focus on environmental conservation vis a vis poverty alleviation as opposed to other factors because of the general long-term effects they tend to have on the general populace.
2. The study will not review the literature concerning other countries except for comparative purposes.
3. The study will evaluate the importance of corporate governance in environmental conservation because of the growing significance of pollutions caused by corporations.
4. The study will assess how Malawi protects the interests of the poor, who rely heavily on the environment, in its quest to achieve its development agenda.

1.10. Assumptions

This section of the study seeks to highlight the aspects that were out of the researcher's control, yet central to the study.

1. The study assumes that the theoretical substance contained in the literature review mirrors the phenomenon under study.
2. The study assumes that the research problem has been clearly defined
3. The methodology utilized in data collection is assumed to be logical and reliable.

1.11 Literature Review

Introduction

This section of the paper will review empirical literature in an effort to create and explain a conceptual basis of this investigation. The debate over whether sound environmental management and poverty reduction are mutually exclusive or supportive aspects is not new. Today, we find ourselves in a very complex situation; having observed the catastrophic effects of environmental degradation there is need to align these two opposing demands by understanding them as sides of the same coin²¹.

This section will traverse through studies related to environmental conservation and poverty alleviation and attempt to compare and contrast various findings as well as group authors into schools of thought with regards to the subjects. The review will enable the researcher expose the gaps in research and the adequacy and contribution of this investigation in filling in the gaps. This section will investigate and endeavor to discover the interaction of the variables under investigation.

Author's Views on Tragedy of the Commons

Ever since Hardin published the article "The Tragedy of the Commons," there has been increasing debate on property rights, common pool resources, and resource degradation. The tragedy of the

21 Epstein, Paul and Emilie Mills (eds.) *Climate change futures: Health, ecological and economic dimensions*. Cambridge, Mass.: Center for Health and Global Environment, (Harvard Medical School 2005)

commons explains the problem of overexploitation of fisheries and forests, air and water pollution, overgrazing, extinction of species, and misallocation of resources²². Hardin postulated that when property rights to natural resources are unenforced or absent, when there is open access, no individual bears the full cost of resource degradation hence overexploitation²³.

Brodie contends that common pool resources are intrinsically ineffective because people are not motivated to manage the resources in a socially efficient manner²⁴. As a result, the property rights school champions for development of private property. They argue that private property is the most logical and effectual way on internalizing challenges that arise from common pool resources. In fact, Ostrom contends that property rights will invariably increase efficiency²⁵.

However, many scholars have questioned Hardin's proposition that effective management requires commons to be in public or private authority. Bollier postulated that enclosure and privatisation can exacerbate problems rather than solve them. Laerhoven and Berge contend "that under certain circumstances communities are able to govern CPRs [common pool resources] on their own, without intervention of the state and without having to privatize the resource²⁶."

Sustainable use of natural resources requires equality among users. This perspective is propounded by Berge and Frank²⁷. They suggest that a similar knowledge of the resource to each other, shared ethics, as well as a high degree of collective autonomy all help in sustainable management of common pool resources. It is Berge and Kanakis enduring opinion that a high degree of equality

22 Chris Armstrong Against 'permanent sovereignty' over natural resources. Forthcoming in Politics [2014] Philosophy and Economics

23 Garrett Hardin, *"The Tragedy of the Commons,"* (New York, 1968).

24 Brodie Waddall, *"Policing the Commons in the Vale of York, c.1550-c.1850,"* in *End of Tradition? Part 1 History of Commons and Commons Management (Cultural Severance and Commons Past)* Edited by Ian D. Rotherham, Mauro Agnoletti and Christine Handley (Wildtrack Publishing, 2010).

25 E. Ostrom, *"A General Framework for Analyzing Sustainability of Social-Ecological Systems,"* [2009] Science 325

26 Bollier David and Harold Weston, *Green Governance: Ecological Survival, Human Rights and the Law of the Commons.* (OUP 2013)

27 Frank van Laerhoven and Erling Berge, *"The 20th Anniversary of Elinor Ostrom's Governing the Commons,"* [2011] International Journal of the Commons

between stakeholders and users of common pool resources is very important especially at the level of justice and procedural power²⁸. Their argument implies a re-balancing of power away from overly powerful corporations towards the marginalised and powerless.

Besides the above, it has been argued that the goals of environmental conservation and poverty alleviation cannot always be reconciled²⁹. For example, the establishment of protected areas³⁰ often causes the foreclosure of future land use options, with economic opportunity costs such as the eviction of former occupiers or right holders in land or resources.³¹ This way, pursuit of one goal at the expense of the other may present an easier way out³².

Author's Views on Poverty and Conservation of Environment

Anderson argues that the relationship between environmental conservation and poverty alleviation is best understood by assessing diverse asset bases of the poor. The asset bases include land quality, farming tools, livestock, housing, cash, and infrastructure.

He contends that many poor people occupy infertile land, have poor infrastructure, use poor farm equipment and lack capital. Therefore, in their attempt to reap from environmental goods, they end up causing environmental degradation. The degraded environment aggravates the existing poverty, which exerts more pressure on the already inferior land.

33

28 Erling Berge and Eda Kranakis, “*Technology-Dependent Commons: The Radio Spectrum*,” [2011] International Journal of the Commons

29 Luke Persha, Anita Agrawal, and Anish Chhatre, “Social and Ecological Synergy: Local Rulemaking, Forest Livelihoods, and Biodiversity Conservation,” [2011] Science 331

30 International Union for Conservation of Nature defines a protected area as a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values.

31 William. M. Adams ‘Biodiversity Conservation and the Eradication of Poverty’ (2004) Science.

32 Gloria L. Gallardo Fernández et al., “*Emerging Commons within Artisanal Fisheries. The Chilean Territorial Use Rights in Fisheries (TURFs) within a Broader Coastal Landscape*,” [2011] International Journal of the Commons 2011

33 Amechi (n8).

Balmford et al argue that children are assets too, both as social security and labor in old age. However, they contend that large families can dissipate capital assets thereby threatening the sustainability³⁴. Hence, analysis of per capita wealth is necessary because levels of well-being are unlikely to rise if the extra wealth is to be shared among several peoples.

They contend that the poor are usually poor because they begin with a low asset base. They have restricted surplus savings to invest in replacing assets they depreciate, rather than building up their asset base. Ideally, income grows as wealth grows³⁵. Nonetheless, the mining industry is replete with instances where development decreases with increase in income—a concept often referred to as resource curse. According to Sachs and Warner, the more resource abundant a country is, the lower its rate of income growth. There is diverse explanation for the “resource curse,” however, the fundamental problem is clearly mismanagement of revenues from resource exploitation. Hamilton and Hartwick use this illustration to emphasise that sensible management of environmental resources can alleviate poverty.

This paper agrees that the environment provides a form of cost effective and readily accessible insurance against risk, particularly food security risks, risks from environmental hazards and health risks for the poor. Conservation of that environment should therefore be a priority for policymakers to ensure one, the continued existence of a source of livelihood and two, a gradual improvement in the economic conditions of the poor, which in other words is called poverty alleviation.

Author’s Views on the Link between Environmental Conservation and Development

Research on the relationship between environmental conservation and development is diverse but produces largely similar outcome with slight contrasts. The world is confounded with a unique challenge in environmental conservation, having observed a significant shift in approach that

³⁴Gloria L. Gallardo Fernández (n 32)

³⁵ Erling Berge and Eda Kranakis (n 28)

requires the alignment of the two, oft considered, opposing aspects; development and environmental conservation³⁶. The significant shift, as highlighted in the MDG recognises environmental conservation for what it really is, an attempt to improve quality of life and sustain life on earth for people everywhere³⁷.

According to Epstein and Mills, the environmental agenda is not a hindrance to human development, on the contrary, it is integral to the development process³⁸. The two scholars recognise that ensuring environmental conservation is difficult to institute and sustain in developing countries. This has to do with two factors-the government's inability to develop and align development and environmental conservation goals-and structural conditions-the prevalence of mass mobilisation and categorisation along class cleavages³⁹.

There is mutual dependence on the natural resources between the rich and the poor. Nonetheless, the poor people, especially in the rural areas, rely heavily on the environment because they live outside the money-based economy. Besides, the rich often control the money based economy. Moreover, the rich are close to the centre of power hence they can exploit the natural resources without being necessarily part of it. As a result, the rich and the poor people look at environmental conservation from diverse lens. The rich contribute to environmental degradation because they are not directly affected by the degradation whereas the poor degrade the environment through overreliance of environmental goods. Epstein noted that environmental management is a vital component in long-term poverty eradication. Therefore, the goals of environmental conservation are not realizable without analogous development gains.

36 Ibid.

37 International Institute for Sustainable Development and United Nations Development Programme. *Summary of the 'Environment for the MDGs' high-level events*: [2005] Environment for the MDGs Bulletin.

38 Epstein, P. R., and E. Mills (eds.) *Climate change futures: Health, ecological and economic dimensions*. Cambridge, Mass.: Center for Health and Global Environment [2005] Harvard Medical School

39 Ibid.

Galizzi and Herklotz agreed with Epstein's assertion. They noted that environmental dilapidation extremely affects the poor populace compared with the rich. The fact that the resources need to protect the environment are the same resources necessary to improve the livelihood of the poor means that steps used in environmental conservation are more effective when designed to also advance development. Further, they assert that measures aimed at protecting the environment can and should have both objectives in mind.⁴⁰ But, Epstein and Mill's propositions do not tell as much about the form the environmental goals and development aims should take.

Authors Views on Sustainable Development

Recent developments in the United Nations system offer an outline of how States should align poverty reduction and development goals. A lot of global effort has gone towards the entrenchment of this relationship into the development agendas of world nations. Starting with the Stockholm Conference of 1972,⁴¹ the Rio Conference of 1992⁴² and then the Johannesburg Conference in 2002,⁴³ the world's policy makers have continued to recognize the need for integration of economic development and environmental conservation. In Johannesburg for example, it was recognized in the Johannesburg Plan of Implementation (JPOI) that, sound and equitable management of natural resources and ecosystem services is critical to sustained poverty reduction and achievement of the Millennium Development Goals (MDGs).

The Former UN Secretary General Koffi Annan commissioned the Millennium Project to develop a practical plan for the world on how to eradicate hunger, poverty and disease that bedevils the world. According to the Millennium Development Goal Principle 7, developed under the auspices of the Millennium Project, the centrality of environment concerns to community development was

40 *ibid.*

41 United Nations Conference on the Human Environment, 1972.

42 United Nations Conference on Environment and Development, Rio de Janeiro, 1992.

43 World Summit on Sustainable Development (WSSD), 2002.

emphasized⁴⁴. The Millennium Development Goals stressed the need to align the principles of sustainable development in national-level development programs and policies. Pearce postulated that to develop environmental conservation and poverty reduction policy requires planning at the national and international level.

He underscore the importance of evaluating the governance feature of environmental conservation because it plays a critical role in poverty reduction by aligning conservation measures with agricultural practices. He noted that governance uses consumer choice to speed production patterns and explore emergence of new market based instruments for sustainability, for instance ecosystem services.

The world's poor, especially those living in rural areas, rely excessively on the environment for the environmental goods it produces, such as food, shelter, clothing, medicine and water⁴⁵. Bakari Kante postulates that the environment provides goods of incalculable value to the poor, who rely on it absolutely. Environmental degradation poses a greater problem to the poor as opposed to the rich who consider environmental damage to represent financial loss⁴⁶. From the foregoing, it is evident that environmental conservation is a vital component in poverty eradication and sustainable development.⁴⁷

However, adherents of the Environmental Kuznets Curve contend that environmental goods ought to be sacrificed in the preliminary stage of economic advancement because the environment is tantamount to a "luxury good"⁴⁸. The principal argument of Environmental Kuznet's Curve is that it is permissible to subordinate environmental concerns to economic development at the initial stage then restore the environment later when the people have become wealthy. Yet, a careful assessment

44 United Nations Millennium Development Goals (n.d.). < www.un.org/millenniumgoals> accessed June 14,2017,

45 Paolo Galizzi and AlenaHerklotz, " People and the Environment: The Role of the Environment in Poverty Alleviation", p. xxiv (Foreword)

46 BakaryKante, The Environment, the Wealth of the Poor? (2004) Poverty &Environment Times.

47 Galizzi and Herklotz (n2).

48 Gangadharan, L., and Valenzuela, R. Interrelationships between income, health and the environment: Extending the environmental Kuznets curve hypothesis. [2001]Ecological Economics.

of Kuznet's proposition of surrendering environmental quality highlights serious ramifications of in policy terms⁴⁹. It is Anderson's enduring insight that Kuznet's Curve ignores the damages that poor environmental quality does on human health that show up in long term economic growth⁵⁰.

Gaps in research

A review of literature related to the relationship between environmental conservation and poverty alleviation reveals gaps. The first is that fact that there is very little research focusing on how to align development goals with environmental conservation. The most comprehensive so far is the study performed by Millennium Development Project that sheds light on how the national and international agendas on poverty eradication should be matched. However, this investigation is part of a broad study on poverty eradication hence environmental conservation is not the focus of the study. The lack of a focused study into the goal and the mode of environmental conservation vis a vis poverty eradication shows a glaring gap considering the importance of the environment in the global as well as specific economy. Therefore, there is need to provide a very detailed research into the areas and structure of how the environment should be conserved while eradicating poverty.

Following the global environmental degradation, one would expect to see a barrage of research into the sector. However, the research has been more focused on the complexity of aligning environmental conservation and poverty eradication. While most research covering this scenario has been focused on understanding the causes of poverty and environmental degradation and ignoring how to better manage such situation. The research performed focus their investigation into the structure in which effective poverty alleviation and environmental conservation goals can be achieved. The research will analyse the current legal framework in Malawi, note areas of weakness and proffer mechanisms on how to ensure environmental conservation and poverty eradication is achieved.

49 Ibid.

50 Anderson Dimaranan, Francois Hertel, and Hoekman Martin The cost of rich (and poor) country protection to developing countries. [2004] Journal of African Economies

1.12 Justification for the Study

This study aims at contributing further knowledge to the topic of environmental conservation and poverty alleviation with a special focus on Africa. The poor in Africa are mostly found in rural areas and are, to a large extent, reliant on resources obtainable from the environment for sustenance. As such, poor populations in Africa are severely affected by environmental degradation. This study seeks to shed light on the vicious cycle of poverty and environmental degradation, and make viable recommendations on sustainable approaches through which environmental conservation shall be effected alongside the goal of poverty eradication.

1.13 Chapter Breakdown

Chapter One: General Introduction

This chapter shall introduce the area of study. It shall address the introduction of the study, background to the study, statement of the problem, hypotheses, and objectives of the study, the research questions and research methodology. The chapter shall also include the conceptual framework and literature review. It shall form the background of the study.

Chapter Two: Dependence of the Poor on the Environment: Which Poor and what Environment/Biodiversity?

This chapter shall discuss the concepts that dominate the paper. It shall discuss biodiversity and the environment in the broad sense. Further, it shall discuss poverty and shall consist of a discussion of the dependence of the poor on the environment-biodiversity. The chapter shall also provide an analysis of direct livelihood linkages between the poor and the environment.

Chapter Three: Legal Framework on Poverty and Development

This chapter shall examine the nexus between the legal framework on economic development policy and that on environmental conservation. It shall provide an analysis of the said legal regimes and shall gauge their [in] effectiveness in addressing the linkages between the concepts of environmental conservation and poverty alleviation. Here, both the International and national legal frameworks will be analyzed.

Chapter Four: Does Conserving the Environment Work to Reduce Poverty?

This chapter shall link environmental conservation with poverty alleviation. The chapter shall also consist of data and findings from research projects conducted on this area. Furthermore, it shall contain the findings of a case study on the linkages between environmental conservation and poverty alleviation that will be conducted in Malawi.

Chapter Five: Conclusion and Recommendations:

This will be the final chapter. It shall give a conclusion, taking into account the discussion in the previous chapters and shall make recommendations.

CHAPTER TWO

DEPENDENCE OF THE POOR ON THE ENVIRONMENT: LINKAGES BETWEEN THE ENVIRONMENT, BIODIVERSITY AND POVERTY

2.1 Introduction

The interplay between environmental and biodiversity conservation, and poverty alleviation is oftentimes disregarded. For some, the two concepts are seen as mutually exclusive and contradictory goals whereas others consider them closely tied as to be taken for granted. The key and important role of environment on poverty alleviation speaks to the two sets of audiences through the diverse ways in which the environment and development are linked.

Environmental conservation which is vital for poverty alleviation is usually considered an unattainable goal trumped by the need for survival and the temptation for economic stability guised through transnational corporations. As such, the nexus between environmental law and poverty alleviation contribute to formulating practical and long-lasting remedies for attaining the balance of alleviation of poverty with environmental protection. In fact, Dinah Shelton opined that, “the ethics of any society can be measured by how it treats its most vulnerable members⁵¹.”

The underlying basis of environmental conservation is that people’s capacity to ensure sustainable development can be influenced by how the legal framework of a country is couched. Their capacity to respect the legal provisions can diminish if they resist or misunderstand the change thereby causing a major huddle in implementation of international law. The guiding idea is that people usually participate and assist in ensuring the law is adhered to if under the benefits of the legislation. Consequently, this results in minimal disruption to the environment.

⁵¹ Dilys Roe and Joanna Elliott (n12)

There are legal tools that may be used to alleviate poverty and address environmental degradation for instance public regulation, private law, market mechanisms and rights based approaches that seek to protect human rights and ensure the populace live in the highest attainable standards of life. However, this chapter will not delve into the legal tools that ensure environmental conservation. On the contrary, this chapter entails a discussion of the environment and biodiversity in a broad sense. It discusses the dependence of the poor on the environment and biodiversity. Moreover, the chapter provides an analysis of the direct livelihood linkages between the poor and the environment and contains illustrations on the exact forms of dependence by the poor on the environment and biodiversity.

The Right to a Clean Environment

The right to a ‘clean and healthy’ environment is a hazy concept in the international arena given that it is limited in reach but still part of the legal as well as moral inheritance. Currently, it is crucial that states take extra caution with regard to management of the environment. For Earth itself to survive hospitably to life upon it—this right must be reimagined and reinvigorated, and as soon as possible.

Many times since the inception of the right to a clean and healthy environment, particularly during globalization of the industrial revolution, the right to a clean environment has been compromised and in some cases obscured by the powerful political and economic interest that have destroyed the environment for financial consideration⁵². The plunder has occurred because the law has been skewed in favour of the rich hence causing plunder of the environmental goods to the detriment of the poor.

52 K. Adrianna., “Damming the Danube: The International I.L.C. of Justice and the Gabcikovo-Nagymaros Project (Hungary v Slovakia)” (1998), 20 Sydney Law Review

The Stockholm Declaration was the first attempt to ensure the right to a clean environment formed the corpus of international law. The Declaration sought to balance the need for economic development and environmental conservation. The Declaration championed for the need of states to incorporate environmental conservation in their development agenda to guarantee maximum benefit for the citizenry.⁵³ Although the declaration respects the international law principle of state sovereignty, it caution states against using the environment in a way that would adversely affect the environment of neighbouring states⁵⁴.

Historical overview of the Right to a Clean Environment

The effect of the increased technological development coupled with human activity meant that there was need to develop measures to ensure there is sustainable development. The need for regulation is necessary because the pace of technological development needed to be checked lest it destabilized the natural balance which would consequently lead to environmental degradation.

In this connection, international environmental law developed mechanisms to guard against unconscionable effects of environmental degradation. However, the issue of environmental protection in the international stage gained currency after the experience of industrial pollution in industrialized countries particularly in the west.

The industries led to congestion in the urban area after the increased instance of rural urban migration, which put a strain on the available resources. Moreover, there was serious industrial pollution caused by gases emitted by industries and toxic wastes discharged into water courses.

53 Bossio, D., Noble, A., Pretty, J., and Penning de Vries, *Reversing land and water degradation: Trends and 'brightspot' opportunities*. Paper presented at the Stockholm International Water Institute/Comprehensive Assessment on Water Management in Agriculture Seminar, Stockholm 2004

54 H. Günther, "Sustainable Development: General Rules versus Specific Obligations" in L. Winfried (ed), *Sustainable Development and International Law (1995)*

In the late 1960s a conference was held to discuss the implications of industrialization that was then going on in the west on the environment. The conference was planned for Stockholm, Sweden and the agenda of the conference focused on industrial pollution and urban settlements. However, the developing countries were of the view that the proposed conference was not going to address their problems, which were largely poverty and the low level of economic growth whereas the conference was preoccupied with urban settlements and industrial pollution⁵⁵. As a result, most of the countries did not take part in the conference.

Another conference was held in 1972. The deliberations of the conference led to the establishment of United Nations Environmental Program (UNEP) with its principal headquarters in Nairobi. The main role of UNEP was to deal with contemporary environmental concerns in a bid to ensure sustainable development.

The United Nations Commission on Environment and Development published the Bruntland Report titled “Our Common Future,” in 1987. The report was primarily concerned with sustainable development. It argued the environmental conservation was not necessarily incompatible with economic development. On the contrary, the report argued, that economic development could be pursued in a sustainable manner thereby guaranteeing environmental conservation. The report highlighted the necessity of states to play an active role in ensure their economic development strategies are compatible with the need to ensure sustainable development⁵⁶.

The report defined sustainable development as development which meets the needs of the present generation without compromising the ability of future generations to meet their own needs. The

55 S. Philippe, “International Law in the Field of Sustainable Development: Emerging Legal Principles” in L. Winfried (ed), *Sustainable Development and International Law* (1995)

56 M. B.M. Alhaji., “From Rio to Johannesburg: Reflections on the Role of International Legal Norms in Sustainable development” [2003] 16 *Georgetown International Environmental Law Review* Fall

idea of sustainable development was very appealing to most countries that it came to dominate environmental management mechanisms. In fact, the principle of sustainable development was the precursor of the right to a clean and healthy environment.

Environmental Degradation

Increased population especially in third world countries has been highlighted as one of the major causes of pollution and environmental degradation. Human activities, especially where the land is under population pressure have negative effects of the environment. Moreover, environmental concern have changed character over the recent years. During the early 1960s, issues concerning the use of pesticides and oil pollution occupied the discussions on environmental conservation. In the 1970s, the discussion shifted to point sources of environmental pollution for instance carbon emission from industries. Emissions from small activities such as car emission was the main concern of environmentalists during the 1980s. The depletion of Ozone layer¹ later occupied the discussion. The current discussion of environmental conservation centres on biodiversity and natural resource conservation. Moreover, remedying the already contaminated environment is being highlighted.

2.2 Definitional Issues

2.2.1 Environment

In the general sense, the environment is defined to include air, water, flora and fauna. The term environment is derived from the French word *environner*, which literally means to encircle. Therefore, environment includes the aggregate of the natural environment; marine, terrestrial,

freshwater, and atmospheric components. It also includes flora and fauna, the original and cultural surrounding and all the human components affecting it.⁵⁷

Additionally, the term ‘natural resources’, which is also used in this chapter, is closely related to the environment. The term refers to resources such as forests, land, water and fisheries. The availability and condition of such environmental resources is vital to poverty-environment linkages, and shall be discussed in this chapter.

2.2.2 Biodiversity

On the other hand, the term ‘biodiversity’ is broadly defined in the Convention on Biological Diversity⁵⁸ to encompass the variety of all life on earth, including variability within and between genes, species and ecosystems. Biodiversity represents the world’s range of natural resources (living). It includes forestry, livestock, crops, fisheries and wildlife. Biodiversity is useful, especially to the rural population in a number of ways. Firstly, it is a source of ecosystem goods and services including medicine, food, shelter, and clothing, building material, clean water and climate regulation. Secondly, the rural poor depend primarily on the environment for their daily sustenance. . As such, the poor population is greatly affected whenever the environment is degraded and biodiversity is lost. Biodiversity loss diminishes the quality and quantity of goods and services available to the poor. In addition, biodiversity increases people’s options in term of nutrition. As a result, it fosters resilience arising out of extreme climatic conditions, disease, or drought, to which the rural poor are relatively vulnerable. Lastly, biodiversity provides mitigation against extreme climatic events thereby providing a cushion during hard times⁵⁹

57 UNEP *Judicial Handbook on Environmental Law*, par 1.2; UNEP Division of Policy Development and Law: <> (accessed 13 June 2015).

58 [1993] ATS 32/ 1760 UNTS 79/31 ILM 818 (1992).

59 ‘Biodiversity and Poverty Reduction: Irish Aid Key Sheet//03’, (Irish Aid: Department of Foreign Affairs, Dublin); <> (accessed 13 June 2015).

2.2.3 Poverty

Poverty is prevalent in sub-Saharan Africa. The NEPAD Environmental Action Plan (NEPAD-EAP) has identified poverty is the cause and effect of environmental degradation in most African countries. Therefore, it can be argued that there is a direct link between environmental conservation and poverty alleviation. In fact, Fabra noted “...poverty and environmental degradation are often bound together in a mutually reinforcing vicious cycle and thus human rights abuses related to poverty can be both cause and effects of environmental problems⁶⁰”.

The role of poverty in environmental degradation in Africa, especially Sub-Saharan African, can be witnessed in both public and private levels. At the public level, the policy makers develop policies that are not stringent in order to attract foreign investment in their countries. In extreme circumstance, states actively participate in environmental degradation or become complicit when environmental degradation is ongoing. The active role of state agents can be witnessed when awarding mining concessions or allowing western countries to dispose hazardous wastes in their territories.

2.3 Poverty-Environment Linkages

The relevance of the environment to the existence of man is indisputable. The natural environment provides the rural poor with different environmental good hence environmental degradation hampers vital ecological processes such as recycling ability of the environment and regulation water flow.⁶¹

We are all dependent on the environment, but the dependence of the poor, especially the rural poor, is more critical for their daily survival.⁶² This is because opportunities for employment and income-

60 Fabra, A. *The Intersection of Human Rights and Environmental issues: A Review of Institutional Development at International Level* (Background Paper prepared for Joint UNEP-OHCHR Expert Seminar on Human Rights and the Environment, Geneva 2002)

61 Fiona Nunan, *Understanding Poverty and the Environment: Analytical Frameworks and Approaches*, (Routledge Publishers, New York, 2015), p. 11

62 Mandala, Elias C *Work and Control in a Peasant Economy: A History of the Lower Tchiri Valley in Malawi 1859 - 1960* Madison: University of Wisconsin Press 1990

generating activities that do not involve natural resources are limited for such persons.⁶³ This dependence, necessitated by the need to survive, means that often, the poor are responsible for cultivating tired soils, cutting down forests and trashing the environment as a result of non-existent waste management mechanisms. As the environment becomes increasingly degraded due to such exploitation mechanisms, more people become impoverished as many others recklessly exploit the environmental resources due to their poverty.⁶⁴ Accordingly, the poor emerge as both the victims and agents of environmental degradation.

This relationship between environmental degradation and poverty has led to arguments for what has been termed ‘pro-poor conservation’ or conservation that caters for the needs of the poor while at the same time promoting sustainable use of the environment. Subsequently, environmental conservation and poverty alleviation have quickly emerged as two of the major global challenges. That the two should or should not be linked is not in question. Rather, it is important to determine the particular manner and aspects in which poverty and the environment are linked. The following paragraphs illustrate the linkages between the poor and the environment.

Over three quarters of the people living on less than one dollar a day live in rural areas.⁶⁵ As such, the rural poor often rely on a wide range of natural resources (biodiversity) and ecosystem services as a direct source of livelihood, and therefore are said to be more vulnerable when biodiversity is degraded or lost.⁶⁶ In fact, it can be stated that ‘environmental damage almost always hits those

63 M., Mwabulambo, March 8, 2016; Human Rights Watch interview with Modester M., Mwabulambo, March 7, 2016
 64 Nwagbar, Eucharia N, Abia Raphael P, Uyang Francis A & Ejeje Joy A, ‘Poverty, Environmental Degradation and Sustainable Development: A Discourse’ (2012) Volume 12 Issue 1 Global Journal of Human Social Science Sociology, Economics & Political Science, 3.

65 Raphael Bille, Renaud Lapeyre, Romain Pirard (eds.) ‘Biodiversity Conservation and Poverty Alleviation: A Way Out of the Deadlock’ (2012) Volume 5 Issue 1 Institute for Sustainable Development and International Relations, 5.

66 Arild Angelsen and Matti Vainio *et al.* (eds.) ‘Poverty and the Environment’ (1998) CROP Publications: Bergen, p. 3.

living in poverty the hardest'.⁶⁷ A number of hypotheses have been put forth to explain why the environment and biodiversity, and its loss, are of direct importance to poor people.⁶⁸

First the environment, and particularly biodiversity, acts as a source of livelihood and income generation. The World Resources Institute (WRI) estimates that, at the global level, 1.6 billion people depend on forest ecosystems in one way or another for their environmental income. Moreover, more than 90% of people living along water basins are fishermongers.⁶⁹ In Indonesia about 95% of the country's total marine catch is attributed to small scale fishing.⁷⁰ The same situation can be observed in West Africa where small scale fishing accounts for about 75% of the total marine catch.⁷¹

At the household level, empirical data indicates that environmental biodiversity accounts for a high percentage of household income.⁷² For instance, in Zimbabwe, data shows that wild income from ecosystems, consisting of wild fruits, thatching grass, timber and fodder, contributed 35% of total household income.⁷³

Accordingly, when the wild and agricultural components of environmental goods are considered, it is evident that biodiversity accounts for a significant share of rural households. A study conducted in Zimbabwe revealed that ecosystem goods and services contribute a third of family income among the rural poor, whereas agricultural income contributes a third of the total income; 2

67 Ibid.

68 Timmer, Vanessa, and Calestous Juma, 'Taking Root: Biodiversity Conservation and Poverty Reduction Come Together in the Tropics,' (2005) Volume 47 Issue 4 Environment: Science and Policy for Sustainable Development, 24-44, at 29, available online at <> (accessed 6 July 2015).

69 Food and Agriculture Organisation (FAO), 2012, 'World Review of Fisheries and Aquaculture', Part 1, available at <> (accessed 6 July 2015).

70 Food and Agriculture Organisation (FAO), 2000, 'World Review of Fisheries and Aquaculture', Part 2, <> (accessed 6 July 2015).

71 Yumiko Kura *et al.*, 'Fishing for Answers: Making Sense of the Global Fish Crisis' (Washington Resources Institute, Washington DC, 2004), p.39.

72 Dilys Roe (ed.) 'Linking Environment Conservation and Poverty Alleviation: A State of Knowledge Review'(2010), CBD Technical Series No.55, p. 14.

73 Cavendish W, 'Quantitative Methods doe Estimating the Economic Value of Resoorce Use to Rural Households: Evidence from Zimbabwe' (2000) World Development Volume 28 Issue 11, 1979.

Third, nature's diversity represents reduced vulnerability to shocks. Indeed, poor people often are highly vulnerable to stresses and shocks associated with climatic events.⁷⁴ Environmental degradation, and particularly ecosystem degradation, amplifies these shocks, and conversely, better ecosystem management can reduce the impact of such climatic events. There has been growing evidence of the role of natural protection, like coral reefs, and coastal vegetation, like mangroves in mitigating coastal storms and cyclones.⁷⁵ In areas where these coastal ecosystems are on a decline, coastal populations that are poor are becoming more vulnerable. For instance in Bangladesh, the disappearing of swamp forests, which have in the past served as a natural barrier against the monsoon waves, has resulted in more severe erosion. Consequently, poor households have been forced to increase spending to protect their small homesteads annually.⁷⁶

Fourth, the environment and biodiversity are important to the poor for cultural and spiritual reasons. Biodiversity, for many poor people, is linked with culture, spirituality and identity. In this regard, the sacred groves of India are illustrative. There are over 50,000 sacred groves in India that play a crucial role in the religious and socio-cultural lives of local communities.⁷⁷ Protection is provided to patches of forests dedicated to deities and ancestral spirits located in wilderness areas; as these provide forum for various religious celebrations that take place in these groves. The foregoing factors are a summary of the importance of the environment/biodiversity to the poor. The following section analyses the direct relationships between the environment and the poor.

74 Ibid.

75 Kendyl Salcito et al., "Assessing corporate project impacts in changeable contexts: A human rights perspective," *Environmental Impact Assessment Review*, vol. 47 (2014)

76 Ibid.

77 Erling Bergea et al., "Lineage and land reforms in Malawi: Do matrilineal and.pdf (accessed May 13, 2016).

2.3.1 Dependence of the Poor on the Environment: Why the Environment is Important to the Poor

Many poor people rely directly on the environment and natural resources for livestock husbandry, agriculture, fishing, basic materials and fuel, to meet both their subsistence and commercial needs.⁷⁸

Natural resources may supplement a household's daily needs and income or can be a primary source of livelihood. From the foregoing analysis, it is evident that poor households derive a significant share of their incomes from natural resources. As such, the degradation of natural resources and loss of biodiversity undermine the current and future livelihoods opportunities of a large population of the poor. Agricultural systems are perhaps most illustrative of this scenario. Loss of drought-resistant crop and livestock varieties and water and soil degradation are imposing threats to improving agricultural productivity, which provides a source of livelihood for majority of the rural poor.⁷⁹

Data estimates reveal that up to 1 billion people globally are affected by land degradation and soil erosion that are as a result of agriculture, overgrazing and deforestation.⁸⁰ Moreover, fisheries provide livelihoods for some of the most marginalised and poorest groups, and often are the major source of animal protein for the poor. Despite this, many small-scale fisheries are over-harvested, mostly by commercial enterprises that are of no benefit to the poor.⁸¹ Additionally, over 2 billion people rely on biomass fuels and traditional technologies for cooking and heating.⁸²

78 Edward B. Barbier, 'Poverty, Development, and Environment' (2010) *Environment and Development Economics* Volume 15, 635-660, available at <> (accessed 1 July 2015).

79 Karonga district is one of the few patrilineal districts in Malawi, see Erling Bergea et al., "Lineage and land reforms in Malawi: Do matrilineal and patrilineal landholding systems represent a problem for land reforms in Malawi?" pdf (accessed May 13, 2016).

80 Ibid.

81 Benson Owuor Ochieng, "Implementing Principle 10 and the Bali Guidelines in Africa," *UNEP Perspectives*, Issue No. 16 (2015),

http://www.unep.org/civilsociety/Portals/24105/documents/perspectives/ENVIRONMENT%20PAPERS%20DISCUSSION_BALI_003.pdf (accessed May 31, 2017).

82 Ibid.

In terms of linking ecosystem services and poverty, ecosystem services aid the poor in meeting their immediate daily needs of energy, food, shelter and income. Ecosystems provide vital services that contribute in a variety of ways to productive activities. For example, ecosystems provide a natural habitat for natural predators that control pests and soil organisms important to agricultural productivity, and wild pollinators that are important to food crops; breakdown of pollutants and waste; maintenance of fertility of the soil through cycling and storage of essential nutrients. These services provide indirect values that are crucial to the livelihoods of the poor, particularly those living in marginalised environments where there is limited access to external technology and other vital inputs. As such, the maintenance of a productive and stable environment contributes directly to the maintenance of livelihood alternatives for the poor. Conversely, impaired or degraded ecosystems lead to a decrease of livelihood alternatives and this increases the vulnerability of the poor.

Biologically diverse ecosystems can be resilient to human disturbances. However, some ecosystems are at particular risk of a sudden collapse when subjected to disturbances.⁸³ For instance, fresh water systems and coral reefs may move from a functioning to a non-functioning state within a short time due to overuse, pollution and other human disturbances that cause a decline of biodiversity or that overwhelm the tolerance threshold of these ecosystems.⁸⁴ The effect is that poor people who rely on these ecosystems are deprived of essential goods and services in a short period of time within which they are unable to adapt.

Environmental conditions constitute a large proportion of health risks to poor people.⁸⁵ In fact, statistics reveal that up to one-fifth of the total burden of disease in the developing nations may be

83 Malawi aligns its mining policy to the Africa Mining Vision,” United Nations Economic Commission for Africa press release, August 12, 2016 <http://www.uneca.org/stories/malawi-aligns-its-mining-policy-africa-mining-vision> (accessed September 14, 2016).

84 Ibid.

85 Kendyl Salcito et al., “Assessing corporate project impacts in changeable contexts: A human rights perspective,” *Environmental Impact Assessment Review*, vol. 47 (2014)

associated with environmental risk factors.⁸⁶ On the global level, nearly a quarter of all deaths can be attributed to the environment.⁸⁷ The poor are most affected by environmental health issues with hazards such as poor sanitation and lack of safe water, occupational exposures to chemicals, and exposure to disease vectors and indoor air pollution playing the largest roles.

Poor sanitation and lack of access to water are among the main causes of poor health and disease in developing nations.⁸⁸ A majority of the rural poor depend on natural water sources such as rivers and streams for their drinking, cooking and washing water. Consequently, water-borne diseases such as cholera, bilharzia and diarrhoea, kill an estimates 3 million people annually in developing nations.⁸⁹ Furthermore, vector-borne diseases such as malaria, which is prevalent in sub-Saharan Africa, account for up to 2.5 million deaths annually and are linked to certain environmental factors and conditions related to contaminated water and poor sanitation.⁹⁰

Indoor air pollution, on the other hand, caused by the burning of traditional biomass fuels, a practice that is prevalent in poor households, for heating and cooking affects an estimated 1 billion people.⁹¹ This exposure results in premature deaths and, in other cases, a host of respiratory diseases. These effects are particularly worse for women and children. A study conducted in rural households of central Kenya revealed that “exposure to high emissions from cooking and other domestic activities for adults results in women being twice as likely as men to be diagnosed with acute respiratory infection or acute lower respiratory infections.”⁹² In India, studies reveal that 130,000 to 150,000 women may die prematurely due to exposure to indoor pollution.⁹³ Moreover, the physical exertion

86 Dilys Roe (ed.) ‘Linking Environment Conservation and Poverty Alleviation: A State of Knowledge Review’(2010), CBD Technical Series No.55, p. 14.

87 Ibid.

88 Ibid.

89 Raphael Bille, Renaud Lapeyre, Romain Pirard (eds.) ‘Biodiversity Conservation and Poverty Alleviation: A Way Out of the Deadlock’ (2012) Volume 5 Issue 1 Institute for Sustainable Development and International Relations, 5.

90 Ibid.

91 World Health Organisation, ‘Fuel for Life: Household Energy and Health’ (2006), p. 11, available at <> (accessed 6 July 2015).

92 Ibid.

93 Ibid.

associated with the search for biomass fuels, such as firewood, crop residue and dung, contributes to the poor health and physical burden of women and children in developing countries.

These illustrations further demonstrate the importance of environmental resources to the poor. The environment, and particularly a sustainable and clean environment, is essential to the health and wellbeing of the poor. Subsequently, environmental interventions can save many poor people from diseases that affect their capacity to earn comfortable incomes, and thus help in the alleviation of poverty, and, more importantly, can prevent many deaths. In fact, studies indicate that about 13 million deaths could be prevented yearly through the making of sound environmental interventions.⁹⁴

As was earlier indicated in this discussion, the environment and biodiversity represent reduced vulnerability to shocks and unpredictable (climatic) events for the poor. Environmental degradation and the mismanagement of natural resources aggravate environmental shocks, and conversely, better environmental management can reduce the impact of climatic events. The poor are the most vulnerable to environmental disasters and environmental degradation. In the short term, environmental degradation causes a strain in the already tough economic conditions of poor people. On the other hand, environmental shocks and disasters can negatively affect long-term wellbeing by compelling poor households to trade assets that would have been otherwise used to cater for future needs.⁹⁵

Disasters such as famine, in occurring through consecutive seasons, cause households' income and reserves to gradually dwindle as a result of continuous poor production. This state results in even more impoverished households as sources of income disappear. Environmental strains in the form of disasters make income-generating efforts by the poor more costly, time consuming and at times

94 Raphael Bille, Renaud Lapeyre, Romain Pirard (eds.) 'Biodiversity Conservation and Poverty Alleviation: A Way Out of the Deadlock' (2012) Volume 5 Issue 1 Institute for Sustainable Development and International Relations, 5.

95 M., Mwabulambo, March 8, 2016; Human Rights Watch interview with Modester M., Mwabulambo, March 7, 2016

dangerous. The dependence of the poor on natural resources as a form of insurance for tough times therefore means that a decline in the abundance of these natural resources reduces the livelihood alternatives of the poor consequently resulting in further impoverishment.

2.4 Impact of Poverty on the Environment

The Poor: Victims and Agents of Environmental Degradation

The environment and natural resources are not only life sustaining, in the sense that they provide clean air, clean water and fertile soils, they also constitute the basic economic raw material for many poor people. The discussion shows that poverty and environmental degradation are inextricably linked. The environment is vital to the poor as a direct source of livelihood; and in the same breath, poverty is often mentioned as a significant cause of environmental degradation. This relationship can be explained as follows.

The poor are in most cases dependent on natural resources (biodiversity) because they lack the economic capacity to purchase them.⁹⁶ For example, small-scale farmers are inclined to derive additional sources of income from wild fruits, nut berries, herbs and medicinal plants.⁹⁷ Pastoralists on dry lands often derive essential nutrients from similar wild flora and fauna in marginal areas.⁹⁸ Poor ill-equipped fishermen derive a variety of coastal and marine resources such as shells, coral, seaweed, and fish to provide food, building material, cultural artefacts and cash income.

The question that begs is why, then, do poor people not give much importance to the conservation of the environment, even if their livelihood is directly dependent on it?⁹⁹ Theorists suggest that the poor are compelled to exploit their surroundings for short-term survival.¹⁰⁰ The focus on short-term

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97 Human Rights Watch interview with Rosbelle K., Mwabulambo, March 8, 2016; Human Rights Watch interview with Sinya

98 Ibid.

99 Ibid.

100 Human Rights Watch interview with Rosbelle K., Mwabulambo, March 8, 2016; Human Rights Watch interview with Sinya

needs for survival purposes leaves little room for taking into account long-term environmental effects.¹⁰¹ In this regard, it has been said that ‘environmental thinking starts after breakfast’ and, with little or no meals at all, there will be little or no thought of the environment.’¹⁰²

Moreover, the most arable land in rural areas tends to be taken over by wealthy farmers who can afford title and modern technology to cultivate large farmlands. Poor populations in such areas often lack access to land tenure as a result of the high costs of requiring land titles.¹⁰³ Consequently, the poor farmers are compelled to occupy and exploit marginal lands, including hillsides, rainforests and arid areas, and cultivate poor soils.¹⁰⁴ As it is difficult to grow good crops on such marginal areas, the resultant effect is more pressure on over-exploited land, severe land degradation and increased poverty.¹⁰⁵ The underlying trend is that poor people have little income and as a result, they are compelled to increasingly use natural resources for their survival, which in turn diminishes the natural resource base. A lowered resource base then reduces the flow of services generated, which worsens poverty.

The World Research Institute in *The Wealth of the Poor: Managing Ecosystems to Fight Poverty*¹⁰⁶ highlighted the following the interdependence between the environment and the poor:

Research shows that to benefit the poor, economic growth must be coupled with policies that reduce inequalities and improve how income is distributed in society. Where the dependence of the poor on natural resources is high, as is in most developing countries, these policies must necessarily involve the environment. And they must translate to

101 Ibid.

102 Kendyl Salcito et al., “Assessing corporate project impacts in changeable contexts: A human rights perspective,” *Environmental Impact Assessment Review*, vol. 47 (2014)

103 World Research Institute, *World Resources 2005*, ‘The Wealth of the Poor: Managing Ecosystems to Fight Poverty, 2005, <> (accessed 1 July 2015).

104 Ibid.

105 World Vision, ‘Poverty and the Environment’ <.> (accessed 6 June 2015).

106 World Research Institute, *World Resources 2005*, ‘The Wealth of the Poor: Managing Ecosystems to Fight Poverty, 2005, <> (accessed 1 July 2015).

governance practices that increase the poor's access to vital resources and their ability to govern these resources so that they share in the income from them.¹⁰⁷

The foregoing implies that in order to achieve the goals of poverty alleviation and economic development, it is also vital to establish stronger linkages between poverty alleviation, environmental protection and environmental management concepts.

2.5 Conclusion

The foregoing chapter has entailed a discussion on the dependence of the poor on the environment. It has analysed particular linkages between poverty and the environment. The following chapter entails a discussion on whether environmental conservation works to reduce poverty. In this regard, the chapter contains a case study of Malawi.

107 Ibid.

CHAPTER THREE: LEGAL FRAMEWORK ON POVERTY AND DEVELOPMENT

3.1. Introduction

The interplay between environmental conservation and poverty alleviation cannot be denied. There is ample evidence to show that where a country places greater emphasis on environmental conservation, the level of poverty tends to decrease¹⁰⁸. As such, it is vital that measures are undertaken to counter the unconscionable effects that flow with environmental degradation. In this light, this chapter will look at the legal and institutional framework in Malawi that aims to counter the apparent environmental degradation and the weaknesses of the legal and institutional framework.

Nonetheless, this chapter will start by taking a cursory look at the concept of environmental justice and its significance to environmental conservation. The analysis of environmental justice helps shade light on the skewed system that favours the rich neighbourhoods to the detriment of the poor neighbourhoods.

3.2 Country Profile

More than three quarters of Malawi's population live in rural areas and the population is expected to double in 20-25 years. The average population density is 105 people/km², with over 6 million of the 12.3 million-population, farming on fragmented customary land¹⁰⁹. The other one third of the population farms on land unsuitable for agriculture. Consequently, this results to land degradation owing to population and land pressure in densely populated areas especially the southern region.

108 Mrs. B. Halle, Mr. J. Burgess, EC Framework Contract EuropeAid/119860/C/SV/multi; Country Environmental Profile for Malawi (AGRIFOR Consult 2006).

109 Ibid.

The pressure on available land leads to soil erosion, deforestation (overreliance on biofuel) decreasing soil fertility, and extreme climatic variations¹¹⁰.

The government of Malawi is currently grappling with inappropriate land management practices and agriculture on unsuitable land, very high soil erosion, excessive use of firewood and timber for construction and brick production and widespread use of fertile soil¹¹¹. The strain on available resources has affected certain essential services such as fisheries, lakes, water supplies, river and lake transport, electricity generation (frequent blackouts), irrigation and agriculture¹¹². Moreover, increasing soil sediments caused by soil erosion are a serious threat to water quality.

Other threats that have a relationship with environmental justice include the threats to water quality cause by pollution with sewerage from urban areas to rural areas and the proliferation of invasive plants. Consequently, the country's, lakes and wetland ecosystem function are under threats. This has resulted to variation in weather patterns, ranging from extreme floods to severe droughts with associated strong winds and droughts¹¹³. Moreover, there has been increased aridification in areas such as the Southern Shire Valley.

The forests in the country are in serious decline (47% in 1975 to 26% in 2006) due to the high energy demands with 93% from charcoal and wood fuel.

3.3. CONSTITUTION

The Constitution of Malawi, 1994 recognizes that responsible environmental management can make an important contribution towards achieving sustainable development, improved standards of living and conservation of natural resources.

110 Ibid.

111 Ibid.

112 Ibid.

113 Ibid.

To give full effect to the Constitutional provisions, the government of Malawi developed the National environmental Action Plan (NEAP) in 1994 through broad public participation. NEAP provides a framework for integrating environmental protection and management in all national development programs with a view of achieving sustainable socio-economic development¹¹⁴. NEAP is also used as a reference document to guide planners, developers and donors.

The 1994 Constitution (the Constitution) of Malawi shows a significant shift from the 1966 Constitution, in terms of applicability of laws. Section 15 of the 1966 Constitution of the Republic of Malawi provided that the law to be applied in Malawi should be Acts of Parliament, the common law, doctrines of equity,' customary law and statutes of general application'" in force in England on 11th August 1902. Section 199 of the Constitution declares the supremacy of the Constitution of Malawi. However, the departure is highlighted in section 200, which does not provide for the application of laws of equity.

Some scholars opine that the 1994 continues the application of pre-1994 laws except statutes of general application. However, this proposition is not sound. The only applicable laws are common law, customary law, and Acts of Parliament. Statutes of general application and doctrines of equity have been excluded. It is contended that the proviso "any laws currently in force", which is provided under section 200, does not include laws that are not mentioned in the section. Indeed, challenges arise with the exclusion of doctrines of equity since they represent that portion of remedial justice. Equitable remedies such as injunctions may be used to stop potential polluters from going ahead with polluting activity. As such, it is important to fill this lacuna by a constitutional interpretation of the section.

114 Government of Malawi, Ministry of Economic Planning and Development, 'Malawi Growth and Development Strategy II (MGDS) 2011-2016, page 22; available at www.Malawi Growth and Development StrategyII 2011 2016.pdf> (accessed May 7, 2016).

Although poverty is deep, widespread and severe in Malawi, the country's poor are disproportionately affected, due to the dynamics of marginalization and vulnerability. Marginalisation in this context refer to deliberate location of a political, economic, or social group at the periphery of material advantage or power by those with political or legal resources¹¹⁵, while vulnerability is the degree of resilience against shock, or “the likelihood that a shock will result in a decline in well-being”¹¹⁶. The poor people in rural areas have limited recourse to justice. Most of property rights conflicts are resolved under customary norms, despite the weak or inexistent property rights safeguards for women and children. Consequently, this leads to feminization of poverty. The rampant marginalization means most people live outside or in the breach of law: as illegal immigrants, squatters, or earn their living in informal labor markets such as poaching and illegal logging. As a result, the illegal activities and increase of squatters in small tracts of land puts a strain on the environment hence leading to environmental degradation. In most prevailing economic marginalisation measures in developed countries, the dominant role is played by the constitution, which affords the citizens social rights.

Socioeconomic Rights in Malawi

The principal role of socioeconomic rights is to ensure access by all human beings to the resources, opportunities, and services necessary for an adequate standard of living¹¹⁷. The Bill of Rights in Malawi's 1994 Constitution, entrenches the right to education, the right to development, rights to pursue a livelihood and to fair labor practices¹¹⁸. The right is included as a justiciable right hence it theoretically affords marginalized groups to challenge existing policies and demand equal access to

115 Stanley W. Khaila et al., *Consultations with the Poor: Country Synthesis Report Malawi* 29 (World Bank 1999), available

at <http://www1.worldbank.org/prem/poverty/voices/reports/national/malawi.pdf>.

116 *World Development Report* 139 (World Bank 2001); François Delor & Michel Hubert, *Revisiting the Concept of 'Vulnerability'*, 50 Soc. Sci. & Med. 1557 (2000).

117 Socio-Economic Rights in South Africa 16 (Sandra Liebenberg & Karisha Pillay eds., Community Law Centre, Univ. of Western Cape 2000).

118 Sections 25, 30 & 44, respectively. Prisoners have the right “to be detained under conditions consistent with human dignity, which shall include at least the provision of reading and writing materials, adequate nutrition and medical treatment at the expense of the State.” section 42(1)(b)

services and resources. In reality though, they are not directly justiciable given that they are second generation human rights. However, courts shall be entitled to have regard to them in interpreting and applying any of the provisions of this Constitution or of any law or in determining the validity of decisions of the executive and in the interpretation of the provisions of this Constitution¹¹⁹.

Moreover, Malawi has entered into a number of international agreements such as the African Charter on Human and People's Rights, the International Covenant on Economic, Social and Cultural Rights¹²⁰, the Convention for the Elimination of All Forms of Discrimination against Women¹²¹, and the Southern African Development Community (SADC) Charter of Fundamental Social Rights and Protocol on Health. Essentially, these agreements give rise to social rights obligations. Pursuant to section 211 of Malawi's constitution, Malawi becomes obliged by international instruments if they have been domesticated by an Act of parliament¹²². Most of these international instruments have not been domesticated into Malawi's Acts of Parliament. However, non-domestication does not automatically extinguish their applicability. The non-domestication can be somewhat mitigated by the principle of interpretation that obliges courts to interpret laws in such a way as to avoid creating breaches with international law or international agreements¹²³. Moreover, the case of *Chihana v Republic* established the applicability of the Universal Declaration of Human Rights is part of Malawian law¹²⁴.

119 Malawi Const. section 14.

120 International Covenant on Economic, Social and Cultural Rights, G.A. res. 2200A (XXI), 21 U.N. GAOR Supp. (No. 16) at 49, U.N. Doc. A/6316 (1966), 993 U.N.T.S. 3. Ratified by Malawi Dec. 22, 1993.

121 Convention on the Elimination of All Forms of Discrimination against Women, G.A. res. 34/180, 34 U.N. GAOR Supp. (No. 46) at 193, U.N. Doc. A/34/46 (accession by Malawi Mar. 12, 1987).

122 Malawi Const. § 211 provides that: "(1) Any international agreement ratified by an Act of Parliament shall form part of the law of the Republic if so provided for in the Act of Parliament ratifying the agreement. (2) International agreements entered into before the commencement of this Constitution and binding on the Republic shall form part of the law of the Republic, unless Parliament subsequently provides otherwise or the agreement otherwise lapses. (3) Customary international law, unless inconsistent with this Constitution or an Act of Parliament, shall have continued application."

123 Malawi Const. section 11(2), stating: "In interpreting the provisions of this Constitution a court of law shall . . . (c) where applicable, have regard to current norms of public international law and comparable foreign case law."

124 Criminal Appeal No. 9 of 1992 (MSCA).

Malawi's Constitution seems progressive on paper as it affirms the rights of women. In fact, section 24 confirms the right of women to equal legal protection, guardianship, to acquire and maintain property, and the right to enter into contracts. However, the courts have failed to secure property rights for women and marginalized groups. The constitution provided for right to property¹²⁵ but private property land holding is oftentimes rare hence poor people, especially in southern Malawi, depend on customary land for their livelihood. Customary rights are less secure compared to private rights. Moreover, large tracts of customary land in Malawi are usually converted to public or private land, thereby leading to land shortage, strain on available land, increased poverty and consequently environmental degradation¹²⁶. The failure of Malawi courts to secure rights for the marginalized is enunciated in the case of *Mchima Tea and Tung Estates Co. Ltd v. Concerned Persons*¹²⁷.

The plaintiff operated a tea plantation on a parcel of land acquired by its predecessors during colonial period. However, the freehold title had been acquired through a racially discriminatory system of land laws. Land shortage in South Malawi led people from surrounding villages to enter and occupy parts of the land. However, the plaintiff successfully evicted the squatters. The squatters had argued that they had title to land based on pre-colonial ancestral title. However, the High court failed to consider whether customary land could limit ownership rights.

The ruling departs from the reasoning of the Australian Court in *Mabo v. Queensland [No.2]*¹²⁸ and *Wik v. Queensland*¹²⁸ where the court found that colonial land titles did not extinguish the traditional customary titles. "It is only the fallacy of equating sovereignty and beneficial ownership of land that gives rise to the notion that native title is extinguished by the acquisition of

¹²⁵Malawi Const. s. 28.

¹²⁶ Between 1967 and 1994 more than one million hectares of customary land was lost to private and public land. Ministry of Lands, *Malawi National Land Policy* 6 (2002), available at <http://www.malawi.gov.mw/publications/landpol.htm>.

¹²⁷ Civil Cause 1665 of 1994 (HCM).

¹²⁸ 187 CLR 1 (1997).

sovereignty¹²⁹.” The court could have used the principle on *nemo dat quod non habet*¹³⁰ rule in Malawi’s law of contract (that one cannot transfer a title one does not legally have), followed by an analysis of the capacity of chiefs, from whom the colonial settlers signed treaties and acquired land. The court lacked jurisprudential capacity and failed to analyze the challenges of the marginalized groups.

3.4. INSTITUTIONAL FRAMEWORK

3.4.1. The Environmental Affairs Department

The Environmental Affairs Department (EAD) in the Ministry of Natural Resources, Energy and Environment (MNREE) is responsible for the administration, implementation and monitoring of Environmental Impact Assessment (EIA).

3.5. ENVIRONMENTAL MANAGEMENT ACT

The Environmental Management Act (EMA) plays a significant role in the regulation of environment in Malawi. The Key environmental challenges are inadequate incentives for biomass energy conservation and supply that lead to unsustainable utilization of forest resources especially woodfuel and use of inefficient end-use technology¹³¹.

The EIA is contained in the National Environmental Act, No. 23 of 1996. The Act outlines the EIA process to be followed and provides the enabling legislation to develop EIA guidelines to assist compliance with EIA requirements. The Act makes EIA a statutory requirement and listed projects

129 Brennan J. in *Mabo*, *supra* note 201. On application of this principle to establish the rights of a dispossessed ethnic group in Botswana, see Clement Ng’ong’ola, *Land Rights for Marginalized Ethnic Groups in Botswana, with Special Reference to the Basarwa*, 41 J. Afr. L. 1 (1997).

¹³⁰ *Henderson & Co v Williams*

131 Government of Malawi, Ministry of Economic Planning and Development, ‘Malawi Growth and Development Strategy II (MGDS) 2011-2016, page 22; available at

<www.Malawi Growth and Development StrategyII 2011 2016.pdf> (accessed May 7, 2016).

cannot be licensed and implemented until a satisfactory EIA study has been completed and approved¹³².

Penalties¹³³

Section 23 of EMA imposes a maximum of K20000 or an imprisonment of 2 year to any perso who contravenes the provisions of Section 24(3), which deals with failure to prepare an environmental impact assessment report.

Since adopting EMA in 1996, Malawi has been utilizing EIA as a tool for assessing and predicting the impact of development projects on the environment. Malawi has had a number of development projects such as construction of Nsanje Inland ort, Kayelekera Uranium Mining Project, and oil extraction in Lake Malawi. EMA makes EIA procedures mandatory for such projects. The EIA is necessary because a significant number of people are affected for example through; exposure to radiation, re-allocation, creation of employment opportunities and contamination of potable water resources¹³⁴. The EMA stipulates the procedure for EIA and makes provisions for its implementation and enforcement.

One of the principal ideas governing environmental is the issue of public participation. However, public participation in Malawi is not clearly formulated. There are several stages such as screening, consideration of possible alternatives to the project, evaluating the impact of the project, predicting the probable impact of the project and undertaking post decision follow-up. To sensitize the public on a project that need public participation, the most common tools that are usually utilized are radio stations, community hearing, public hearings, and information notices.

132 Environmental Management Act

133 Ibid.

134 Glasson J, Therivel R, Chadwick A *Introduction to rd Environmental Impact Assessment*. 3 ed. (Routledge Taylor and Francis Group, London 2005)

Nonetheless, public participation in Malawi faces a number of limitations such as inadequate briefing of projects, tendency of local chiefs to dominate discussions thereby limiting the views of ordinary people, high illiteracy in the country hence inability to understand complexity of environmental issues, and absence of independent monitoring of public participation. In most cases, there is pressure from donors and government agencies hence inadequate participation and difficulty to meet relevant people. Moreover, environmental issues are given low priority, a situation that is multiplied by the limited number of experts with skills of public participation.

It is not surprising that in the Uranium Project and Kapani Meat Plant processing facility in Blantyre there was lack of communication on the potential benefits and costs of the development project. The project that illustrates the absence of public participation in Malawi is the Oil Drilling project in Lake Malawi. The government went on with the oil drilling project despite concerns raised by experts on the attendant consequences. The point of concern was that waste water produced from drilling produced along hydrocarbons on land or water, which would alter the salt concentration exceeding that of sea. The presence of hydrocarbons, it was noted, prevents oxygen transfer in the water column thereby affecting aquatic life-support systems. Moreover, highly toxic hydrocarbons such as benzene, may render water unfit for consumption and contaminate algae, fish eggs and invertebrate larvae hence preventing multiplication of fish. Recent history indicates that Malawi does not have enforcement regulations to prevent disposal of waste treated water. This poses a major challenge given that Lake Malawi has a flushing ability¹³⁵ of 750 years¹³⁶

The benefits of Lake Malawi are innumerable. Lake Malawi is a source of drinking water for Blantyre and surrounding cities and Lakeshore districts of Malawi; produces fish that provides a form of protein for the whole country¹³⁷; it is a source of livelihood for over 2 million people living

135 This means any spillages or pollution in the Lake will take this period of 750 years for the Lake to flush itself through natural processes

136 Kosamu IBM (2011). Environmental impact assessment application in infrastructural projects in Malawi. Sustain.

137 Republic of Malawi. Draft fisheries policy 2012-2017 (Government Printers 2013)

along the lake shore; it is the only fresh water lake with outstanding universal values in the region¹³⁸. Despite the significance of the Lake to the people of Malawi the government of Malawi did not undertake EIA according to international standard.

Firstly, the process of awarding oil exploration licenses was not transparent, valuable information was not divulged, hence it did not meet international standards. Moreover, Malawi has not developed any safeguards in embarking oil exploration despite the fact that the lake is the country's only fresh water lake. Lack of public participation indicates that oil and gas exploration will only benefit the elite at the expense of the poor. The peripheral role given to public health and environmental concerns in the planning of oil exploration shows that the government is not clear on occupational safety and health regulations. Indeed, absence of adequate can be attributed to existence of vested interests in the oil exploration. Malawi's legislation on EIA conforms to international standards. However, the standards have been set aside in the interest of oil companies and elitist interests.

3.6. Corporate Governance

Corporate governance refers to the system through which a company's activities are directed. Its primary concern is to create a balance between socio-economic goals and communal goal while fostering efficient utilization of resources, stewardship and accountability by aligning the interests of the corporation, the society and individuals¹³⁹.

Good corporate governance requires the board of directors to govern the company in a manner that ensures it maximizes the long-term value of the shareholders while observing the core principles of accountability, transparency and responsibility.¹⁴⁰

138 UNESCO, 2014 Reactive Mission Report)

139 Committee on the Financial Aspects of Corporate Governance (chaired by Sir Adrian Cadbury), Report (1992).

140 Private Sector Initiative for Corporate Governance, Principles for Corporate Governance in Kenya and a Sample Code of Best Practice for Corporate Governance.

In the broad sense, it engages professional advisors (auditors and Company Secretaries), Registrar of Companies and courts of law. Regulation involves two principal governance organs i.e. the members and Board of Director¹⁴¹. Directors are the primary decision-makers in the company, and therefore they are at heart of corporate governance. Consequently, the effect of their monitoring is directly correlated to the quality of corporate governance

Malawi's Companies Act largely mirrors global good corporate governance standards, however, this study outlines various gaps insofar as meeting the good corporate governance standards is concerned. These gaps focus on the sanctions imposed under the Act as well as the enforcement challenges they pose with reference to contemporary cases of corporate breach of policy standards.

Recent catastrophes contribute to the significance of corporate governance as an environmental conservation and poverty alleviation tool. The BP oil spillage catastrophe was blamed on the directors culture of cost-cutting (by purchasing poor quality equipments) and outsourcing. The poor quality equipments could not extract oil safely hence the oil spillage that brought unprecedented environmental catastrophe¹⁴². The BP catastrophe provides evidence of the extent to which corporate governance affects a company's ability to reconcile its economic interests and the social obligations placed on it.

However, Malawi is yet to learn from the BP Case as enunciated by the activities of Paladin Energy group, a company that specialises in Uranium mining in Malawi. It is the ninth largest producer of Uranium supplying around 4% of the world market¹⁴³. However, the company does not have experience in running large scale mining operation hence it lacks technological capabilities to address major organisational challenges such as social and environmental risks. In fact, the company's activities attracted protests from local civil society organisation. In 2014, dead fish were

141 Ibid.

142 R La Porta, F Lopez-de-Silanes, A Shleifer and R W Vishny, Law and Finance, National Bureau of Economic

143 Ibid.

washed ashore Lake Malawi and the locals blamed Paladium Energy. The government promised to investigate the matter but nothing was forthcoming. Certainly, failure to respond to local interest, especially pertaining to the environment, would normally attract tough penalties for directors and the company and in extreme circumstances lead to the withdrawal of a mining licence. In addition, Malawi has already granted licences for extraction of oil in Lake Malawi in the absence of a Comprehensive Petroleum exploration Act.

The challenges are not only caused by lack of political goodwill, but also the failure of Malawi's companies act to deter environmental degradation. For instance;

- i). Fines are set out in the Act without due consideration as to nuances of specific cases. This could potentially make the fines redundant or extremely harsh based on the circumstances of the case.
- ii). Strict locus standi requirements in derivative suits has barred claimants.
- iii). Although criminal sanctions are provided, prosecution has been largely unsuccessful as the institutional framework is wanting.
- iv). The Act is vague on what is expected of a director in regard to the environment.

Nevertheless, corporate governance is increasingly applied in diverse cop

to an extended form of monitoring corporate activities that include the impact on society and the natural environment. This additional agenda that companies take on, often in response to demands from stakeholders, can create tension and conflicting priorities among the traditional roles of shareholders, boards of directors, and chief executives as it asks them to shoulder corporate responsibilities in new ways.

Despite the relatively high profile of corporate social responsibility (CSR), it remains a challenging concept and principle, attracting ardent supporters and a fair share of strident critics. And businesses seem unsure how to approach and manage a CSR agenda, if they have one at all.

The presence, profile, and prominence of CSR in Malawi are ambivalent at best. Many local companies still regard CSR with much wariness or indifference. Unsurprisingly, the limited CSR efforts in Malawi are generic and lack the contextualisation to local needs and conditions.

Singapore-based businesses tend to view CSR as a compliance issue, rather than as a way of doing business. At another level, the formalism and formality in going through the motion of being a responsible corporate citizen is damaging to the overall development of CSR in Malawi

The ISO 26000:2010 Guidance on Social Responsibility (clause 2.18) defines “social responsibility” as the “responsibility of an organization for the impacts of its decisions and activities on society and the environment, through transparent and ethical behaviour that¹⁴⁴:

- Contributes to sustainable development, including health and the welfare of society;
- a). Takes into account the expectations of stakeholders;
- b). Is in compliance with the applicable law and consistent with international norms of behaviour; and
- c). Is integrated throughout the organization and practiced in its relationships.”

¹⁴⁴Keay A, ‘The duty to promote the success of the company: is it fit for purpose?’ University of Leeds School of Law, Centre for Business Law and Practice Working Paper (2010),

3.7. Forests

The goal of the Forest Policy is to enhance the contribution of the Forest Sector in the provision of economic, social, and environmental goods and services¹⁴⁵. The policy seeks to expand the mandate to cover all types of forests as well as devolve the management of forests to forest conservancies and community forest associations. Among the specific objectives of the forest policy are to contribute to sustainable land use through soil, water and biodiversity conservation, and tree planting through the sustainable management of forests and trees and promote forest extension to enable farmers and other forest stakeholders to benefit from forest management approaches and technologies¹⁴⁶.

The provisions of the Forestry Act go in tandem with the policy object of the forestry sector and promote woodfuel production. In fact, the Act gives the private sector a number of incentives to lure it into investing in forestry development. Moreover, the Act provides for community participation in forest management and conservation whereas providing for various penalties for forest offenders.

Water

The Water Act emphasizes importance of conservation of water catchment areas and promotes public participation in processes, projects and programs. The provisions contained in the Act have a bearing on the production and supply of biomass fuel because cutting down trees has a significant effect on water catchment areas.

145 Government of Malawi, Malawi State of Environment and Outlook Report; Environment for Sustainable Economic Growth (Government Printers 2013).

146 Government of Malawi, Malawi State of Environment and Outlook Report; Environment for Sustainable Economic Growth (Government Printers 2013).

On the other hand, regulation and protection of water catchment may also restrict access to woodfuel from the protected area. The integrated management policy has linkages into other relevant sectoral activities including woodfuel and charcoal industry.

3.8. Challenges

The bid to ensure environmental conservation to alleviate poverty faces numerous challenges. One major barrier to sustainable development is lack of data to inform decision-makers. For example, data on economic value of natural resources in Malawi is scanty. Reliable estimates of stock and value of fish or the value of forest products are not available¹⁴⁷. This makes determination of users difficult and more often, fees are lower than the real market value, hence inability to replace most plantations once harvested.

Coordination and cooperation for information sharing and experience exchange among local authorities is essential for achieving sustainable development¹⁴⁸. This remains a barrier in the country as stakeholders consulted mentioned poor funding, poor coordination and absence of lead organization responsible for communication to be the major challenges faced by Malawi in achieving this¹⁴⁹. There is need for lead organisations responsible for coordinating and communicating information on sustainable development to local authorities.

Malawi has developed and implemented a large number of policies related to environment. The legislations and policies are generally good especially EIA. However, the laws and policies need better harmonization. The main problem is that the relevant policy and legislative framework are

147 Government of Malawi, *Malawi State of Environment and Outlook Report; Strengthening Environmental Education and Public Awareness for Sound Environmental Management* (Government Printers 2013).

148 Food and Agriculture Organisation (FAO), 2000, 'World Review of Fisheries and Aquaculture', Part 2, <<http://www.fao.org/docrep/016/i2727e/i2727e01.pdf>> (accessed 6 July 2017).

149 Dilys Roe (ed.) 'Linking Environment Conservation and Poverty Alleviation: A State of Knowledge Review'(2010), CBD Technical Series

very complex and relevant documents pertaining to a specific area of environmental protection are only known about in the concerned ministry¹⁵⁰. There are few follow-ups of the existing laws hence regulations are not respected. This can be attributed to lack of priority by the government, lack of manpower, equipment and funding.

Although EIA in Malawi is ultimately overseen by EAD, the limited awareness of cross-cutting themes has hampered the quality of EIA¹⁵¹. Follow-up audits, monitoring and environmental plans are rarely carried out because of lack of resources and work force. Moreover, licenses are usually abused and standards not met by local authorities and contractors¹⁵². The lack of enforcement is mainly due to the lack of manpower and resources.

Whilst most strategies and policies specifically include EIA, the government oftentimes ignores the environment purposely especially when it is in conflict with economic growth aspects, especially at the ministerial level. In addition, some action plans and strategies within different departments that address common resources for instance water and irrigation are not coordinated thereby creating confusion and conflicts of interest across departments charged with implementation¹⁵³.

The projected medium-term outcome for environmental conservation according to the MGD focuses on improving compliance with natural resource management and environmental law. In a bid to ensure the MGD is implemented in partnership, the sought to assist thematic teams to review progress. The teams comprise of civil society, ministries, donors and private sector. Moreover, the

150 Government of Malawi, Ministry of Economic Planning and Development, 'Malawi Growth and Development Strategy II (MGDS) 2011-2016, page 22; available at www.Malawi_Growth_and_Development_StrategyII_2011_2016.pdf> (accessed May 7, 2016).

151 Government of Malawi, Ministry of Economic Planning and Development, 'Malawi Growth and Development Strategy II (MGDS) 2011-2016, page 22; available at www.Malawi_Growth_and_Development_StrategyII_2011_2016.pdf> (accessed May 7, 2016).

152 Department for International Development (DFID), 'Wildlife and Poverty Study', Rural Livelihoods Department, London

Government of Malawi has improved coordination with cooperating partners and donors by committing to align their activities and support to MGD. However, the success of this venture requires heavy financial support to establish modalities and mechanisms to implement activities including public private partnership.

The government of Malawi accords an important position to civil society in the environment management system. District Assemblies are responsible for managing local development plans, ensuring the implementation of concrete environmental actions, and including EIA and environmental and natural resource utilisation programs by CBOs and NGOs, who, along with Scientific Research Institutions, are included in the policy development process at national level. But there is still lack of understanding of roles and responsibilities in environmental management at the village level, often resulting in expectancy that the government has to manage and pay for everything.

Corruption is considered a barrier to achieving sustainable development and in Malawi, it was cited as one of the key constraints to development. The 2010 survey by the Governance and Corruption Authority noted that corruption is a barrier to successful implementation of laws to protect environment because perpetrators bribe officials tasked to enforce proper environmental principles.

Other threats to achieving sustainable development include climate change, HIV/AIDS and global economic crises. Climate change is threatening water resources as well as hydropower generation as dry spells are increasing in frequency and this is also affecting the foremost important economic activity in the country, agriculture. Climate change is also expected to affect biodiversity and impact the health sector by increasing vector borne diseases. The HIV/AIDS pandemic mostly affects the productive population (15-49 years), which not only places a severe burden on the country's economic status but also compromises the achievement in sectoral growth and

development in all aspects. Government initiatives that encourage voluntary testing and provision of free antiretrovirals therapy and nutrition programs have helped in this regard.

3.9. Conclusion

The government needs to contemplate the many factors involved in a dynamic and complex situation before making decisions that instigate actions that will influence the efficiency, effectiveness and ultimately the sustainability of its environmental management strategies. Irrespective of the way the change originates, sustainable management of management and poverty alleviation requires a planned and structured approach to help align the countries policies with the change direction. Indeed, every strategy needs the concerted efforts from all the stakeholders to mitigate the unconscionable effects of environmental change on the poor populace and the society in general.

In its most simple and effective form, the environmental management strategy should involve working with civil society groups, government institution and community based organisations to help people understand what the enacted legislations and policies mean for them, helping them make and sustain the transition and working to overcome any challenges involved.

The underlying basis of environmental conservation is that people's capacity to change can be influenced by how change is presented to them. Their capacity to adapt to change can shrink if they misunderstand or resist the change, causing barriers and ongoing issues. The rationale is that if people understand the benefits of change, they are more likely to participate in the change and see that it is successfully carried out, which in turn means minimal disruption to the policy strategy.

The success of any legislation and policy on environmental conservation and poverty alleviation is pegged on the ability of individuals to perceive that there is a compelling need to follow the legislative pronouncement; there is involvement in the change process; and that the benefits of change are highlighted. However, introducing any policy brings with it some level of anxiety that

emanates from reduction in autonomy, new ways of working, increased workloads that impact negatively on peoples work situations and interaction with the environment.

The importance of the environment to the economic sectors has only recently been prioritised in policy and planning. Most important of these is the non-sustainable use of land and natural resources in subsistence agriculture, and urgent implications to food security and social well-being. Currently subsistence agriculture, roads, energy and water are recognised as critical sectors for economic upgrading and have been targeted accordingly in the latest planning policy. In this light, the government must incorporate the social and environmental costs in forests, water, and air. In forestry, the government must ensure that royalty rates and fees reflect market prices of forest products; increase the level of funding of the Forestry Department, and carry out comprehensive assessment of the value of forest products in the country. Taking into account the full economic value of ecosystem services and the cost of their degradation in decision-making could help slow or reverse ecosystem degradation. With regard to water resources, price of water should reflect the full cost of social and environmental cost. This will help environmental degradation hence alleviating poverty.

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CHAPTER FOUR

DOES CONSERVING THE ENVIRONMENT WORK TO REDUCE POVERTY? CASE STUDY OF POVERTY REDUCTION- ENVIRONMENTAL CONSERVATION PROJECTS IN MALAWI

4.1 Introduction

The dependence of the poor on the environment and/or biodiversity has been established by the foregoing chapters. This chapter shall analyse direct linkages between biodiversity conservation and poverty alleviation. It shall comprise a case study of environmental projects in Malawi that have been aimed at reducing poverty among the rural poor who rely heavily on environmental resources for their livelihood.

4.2. Sustainable Development

It is anticipated that in future, the natural resources needed to sustain the human population will exceed the available resource at the present rate of consumption. Indeed, uneven and unsustainable levels of consumption have resulted in an increasingly stressed environment, where desertification, natural disasters, and biodiversity loss endanger animals and plants species as well as humans. As such, the challenge of reversing the degradation of natural resources while at the same time meeting its ever-increasing demands for them is a daunting task because it involves significant changes in institutions, policies and practices.

4.3. Sustainability Is What Really Matters

Sustainability is the most important component in the use of natural resources. Exploitation of natural resources is deemed sustainable if it can be maintained over the long term without damaging

the ability of the natural resource to support future generations. In essence, sustainability does not refer to resource that remain unutilized. Conversely, it refers to determining rates of using the natural resource to ensure they do not risk the ability of future generations to use the resource.

Environmental resource in this case refers to the environment's assimilative capacity; the ability of the environment to accept certain pollutants and render them benign. Therefore, environmental degradation refers to the depletion of the earth's assimilative capacity.

Poor governance of natural resources coupled with the assumption of state control over land have become two of the greatest threats to human livelihood and security¹⁵⁴. Despite significant efforts by the government, multilateral development banks and bilateral aid donors, efforts to ensure the concerns of the affected communities are incorporated in development and environmental conservation agenda have largely failed in Malawi.

The reason for the failure is not hard to fathom especially in relatively remote regions where there are conflicting claims to fisheries, land and mineral either by legal right or by customary use. The salient feature of the conflict is that they are oftentimes predominated by private sector and the government's development interest, which are more powerful than the interests of the local populace. Typically, public participation is usually conducted long after the decision was made.

The skewed interest of the government and private sector vis a vis the local communities is evident in the award of mining concessions.

154 Kaufmann, D., Kraay, A. and Mastruzzi, M.. Governance Matters VII : Aggregate and Individual Governance Indicators 1996-2007 (2008) Policy Research Working Paper Series 4654, The World Bank.

The situation is largely the same in regard to the awarding of mining concessions. The individuals who are likely to lose their livelihood and land are usually represented superficially during the “stakeholder consultations” that are usually dominated by developers and government agencies¹⁵⁵.

The government and the private sector usually make a decision long before public participation is undertaken. The question that they seek to answer is the degree of environmental degradation that will be mitigated and the expense that will be devoted in the restoration.

Nevertheless, mining is a complex venture and it usually presents a challenge because its mitigation is usually very expensive or impractical. Moreover, the cost of returning the land to its initial state is often expensive as to make it untenable. Although large commercial mining operations are usually carried out using technically sophisticated machinery, mining operations remain crude by the standards of other industries¹⁵⁶.

Nevertheless, the government of Malawi recognizes that there is a link between environmental conservation and poverty alleviation as enunciated in chapter 2. As such, the government supports efforts to ensure conservation of biomass fuel for instance the efficient cook stove.

4.4. Biomass Fuel

Indeed, biomass fuel is the most important source of energy in Malawi. Studies have indicated that there is a widening gap between demand and supply of wood-fuel hence there is need for dedicated policy intervention to mitigate the resultant effects of a mismanaged resource¹⁵⁷.

There is an apparent mismatch between biofuel supply and demand across various parts of Malawi. To resolve the apparent energy supply and demand disparity, the Government of Malawi is

155 Ibid.

156 Ibid.

157 Ibid

continually promoting social forestry and agro forestry programs to increase the stock of woody biomass in farms. Promoting agro forestry is meant to counter the loss of forest trees where forestland is converted to settlement land. The use of biomass fuel has not increased despite government's efforts to encourage use of alternative fuel.

It has become manifestly clear that biomass fuel is certainly going to remain the main source of energy for heating and cooking in most households in the foreseeable future. Moreover, the production of biomass fuel primarily fuel-wood and charcoal have the potential of employing about 300,000 people.

It is important to manage the supply of wood fuel to ensure sustainable supply to meet the growing demand. In a quest to manage the supply of biomass fuel, the energy sector is inundated with the following challenges; increasing imbalance between demand and supply, competing land use activities, and the negative effects of poor management of the forest cover and inefficient tree tenure systems. The unstable use of biomass has negative effects on the environment for instance unpredictable rainfall patterns and climate variability.

Other challenges include weak planning, coordination, monitoring and evaluation capabilities due to insufficient allocation of financial resources and inadequate and weak institutional arrangements which cannot facilitate sustainable woodfuel development and consumption and as well as lack of an engendered integrated woodfuel development strategies.

The nature of the abovementioned challenges indicates that the challenges faced in trying to ensure there is a sustainable use of biomass fuel affect different sectors among the forest, energy, environment, agricultural, health, industrial education and water.

4.5 Case Studies

4.5.1 The Efficient Cook Stove Programme: Malawi

Malawi has experienced a 35% loss in its forest cover between 2000 and 2005.¹⁵⁸ The loss is attributed to the rural population's over-reliance on biofuel.¹⁵⁹ Indeed, over 95.7% of Malawi's rural population depend primarily on wood as its main source of fuel. Given that 84.7% of Malawi's population live in rural areas means that there is immense pressure on the natural resources which leads to high levels of deforestation.¹⁶⁰

The resultant effect of this loss of forest cover is that the population is forced to cover longer distances in a bid to collect firewood as the population grows and wood resources become increasingly scarce.¹⁶¹ Furthermore, deforestation has caused land to become less arable and has also resulted in massive erosion in these rural areas.¹⁶² The overall effect has been more pressure on the rural poor who are most vulnerable to the loss of natural resources which provides a source of livelihood for a majority of the rural poor population.

Other than the environmental consequences of wood use in Malawi, such high wood use also results in serious health implications on the populations.¹⁶³ Cooking in most rural households in Malawi is traditionally conducted on three-stone open fires.¹⁶⁴ These open fires are thermally inefficient, due to loss of heat, and produce large amounts of smoke which result in indoor air pollution.¹⁶⁵ Consequently, indoor pollution results in more than 1.6 million deaths annually.¹⁶⁶

158 Clean Development Mechanism (CDM) – Executive Board, 'Programme Design Document Form for Small-Scale CDM Programmes of Activities (F-CDM-SSC-PoA-DD) Version 02.0', page 1; available at <www.2013-%2004-%2005-malawi-poa-dd-v2.0.pdf> (accessed on April 16, 2016).

159 Ibid.

160 Ibid.

161 Supra, note 1.

162 Ibid.

163 Ibid.

164 Ibid.

165 Ibid.

166 World Health Organisation, 'Fuel for Life: Household Energy and Health' (2006), p. 11, available at <> (accessed 6 July 2015).

It is in a bid to curb this cycle of destruction that the Environmental Affairs Department, received the cook stove designs from Alchemy Carbon Limited.¹⁶⁷

The ‘Efficient Cook Stove Programme was rolled out on February 1, 2013 and is expected to run for a period of 28 years.¹⁶⁸ The aim of the Cook Stove project is to distribute energy efficient cook stoves across rural household in Malawi.¹⁶⁹ The cook stoves are distributed free of charge with a highly subsidized installation charge to rural households cooking with firewood in Malawi.¹⁷⁰ In this regard, the target population for the cook stoves is the rural poor. The move to distribute the stoves free of charge, with a subsidized installation fee, has therefore taken into account the financial capacity of the target population. Accordingly, this move will ensure high uptake of the cook stove programme among the rural poor.

The cook stove programme is aimed at yielding a range of other sustainability benefits besides that of reduced carbon emissions.¹⁷¹ The programme proposes to contribute to sustainable development in Malawi in various ways. The expected social benefits include the following. Firstly, the programme will cause a considerable reduction in the time spent in collecting firewood and therefore reducing the work burden on rural families.¹⁷² Consequently, rural households will be presented with alternative opportunities for economic development and a considerably higher standard of living.¹⁷³ Secondly, the cook stoves will cause a reduction in the amount of indoor air pollutants from the burning of biomass.¹⁷⁴ Consequently, the reduction of emissions will reduce the

167 Ministry of Natural Resources, Energy & Mining ‘Proposed Balaka Improved Cook Stove Clean Development Mechanism (CDM) Project’; available at <> (accessed on April 16, 2016).

168 *Supra*, note 1, page 18.

169 Chinasi Foundation, ‘Gold Standard Project- Improved Cook Stoves’; available at <> (accessed on April 23, 2016).

170 *Supra*, note 1, page 2.

171 *Ibid.*,

172 *Ibid.*

173 Rachel Etter-Phoya, “Unanswered Questions Remain Unanswered on Oil and Gas Exploration In Malawi’s Lake and Land (PWYD Malawi Press Release, 24 June 2016),” post to “Mining in Malawi” (blog), June 29 2016, <https://mininginmalawi.com/2016/06/29/unanswered-questions-remain-unanswered-on-oil-and-gas-exploration-in-malawis-lake-and-land-pwyp-malawi-press-release-24-june-2016/> (accessed July 8, 2016).

174 *Ibid.*

likelihood of respiratory diseases and thus impacting positively on the health of rural households.¹⁷⁵

The reduction in respiratory diseases will lead to reduced rural households' expenditure on health services. These funds could in turn be invested in other income-generating activities for the household.

The expected environmental benefits include, firstly, a significant reduction in Malawi's greenhouse gas emissions; secondly, reduction in the use of non-renewable biomass from Malawian forests. The reduction in greenhouse emission preserves the forest cover, wildlife habitat and the forest ecosystem. Thirdly, reduction in wood fuel consumption leads to reduction in deforestation which reduces the degree of soil erosion. Lastly, the protection of the existing standing forests will ensure the maintenance of watersheds that regulate water table levels.¹⁷⁶

4.5.2 The Climate Adaptation for Rural Livelihood and Agriculture (CARLA) Project

Malawi relies heavily on rain-fed agriculture. More than 90% of the population, especially the rural poor generate a majority of their income from subsistence farming.¹⁷⁷ Nevertheless, rapid degradation of the environment because of expansion of agriculture in to marginal areas, extreme weather conditions, increased deforestation and inability of a majority of the rural population to adapt to the extreme environmental conditions pose food security challenges in Malawi.¹⁷⁸ The situation is worsened by lack of knowledge and skills among the rural poor in management and productive use of natural resources.¹⁷⁹ Accordingly, Malawi's high vulnerability to climatic changes

175 Karonga district is one of the few patrilineal districts in Malawi, see Erling Bergea et al., "Lineage and land reforms in Malawi: Do matrilineal and patrilineal landholding systems represent a problem for land reforms in Malawi?" *Land Use Policy*, vol. 41 (2014), p. 64. For a general discussion of the impacts on women in Malawi, see Women's Legal Resource Center, "Women's access to land and household bargaining power: a comparative action-research project in patrilineal and matrilineal societies in Malawi," March 2011, http://www.landcoalition.org/sites/default/files/documents/resources/WLR_9_Malawi.pdf (accessed May 13, 2016).

176 Ibid.

177 Global Environment Facility (GEF), 'Project Development and Preparation: Request for Project Preparation Grant (PPG) Under the Least Developed Countries Fund,' page 1; available at www.Malawi%20LDCF%20PPG%CARLA%20reallyfinal%20submit%20August28_2007 (accessed on May 2, 2016).

178 Ibid.

179 Ibid.

require significant adaptation methods to address the interplay between agriculture, climate, and livelihood at the community level.¹⁸⁰

The main aim of the CARLA project is to improve resilience of local communities to the prevalent climate unpredictability and future climate change by developing adaptation policies that will improve rural livelihood and agricultural production in Malawi.¹⁸¹ The project's argument is that better management of climatic risks that exacerbate issues such as environmental degradation, deforestation and lower agricultural yield due to adverse climatic conditions; the project shall be addressing one of the key challenges identified in the Malawi Growth and Development Strategy I (MGDS) 2006-2011 and the Malawi Growth and Development Strategy II (MGDS) 2011-2016.¹⁸² Moreover, and most importantly, the project fosters sustainable economic growth and improved rural livelihoods.¹⁸³ In essence, the CARLA project aims at improving the rural poor's adaptation to the changing climatic patterns, by the introduction of adaptation mechanisms that aid in improving agricultural yields; and, subsequently the quality of life of the rural poor through increased food security and economic opportunities.

The CARLA project focuses on actions that lead to reduction of environmental degradation by introducing better adapted agricultural policies thereby reducing poverty through strengthened rural livelihood.¹⁸⁴ In this regard, the project generally aims to assist communities to assess their vulnerability to climate variability and change, and to develop and effect action plans that reduce

180 African Development Bank Group, 'Project Appraisal Report: Climate Adaptation for Rural Livelihoods and Agriculture (CARLA)-Malawi' October 2011, page IV; available at <www.malawi.gov.mw/2011/10/20climate%20adaptation%20for%20rural%20livelihood%20and%20approved.pdf> (accessed April 29, 2016).

181 Ibid., page 10.

182 Supra, note 38. It is provided herein as follows:

The MGDS is aimed at achieving and sustaining the Millennium Development Goals (MDGs) and making Malawi a hunger free nation through fostering sustainable economic growth and the creation of wealth with fair and equitable distribution. The MGDS recognizes that agricultural development will drive medium term growth by expanding and diversifying production. The agricultural sector is expected to contribute to sustainable economic growth that is considered central to Malawi's ability to reduce poverty, achieve the MDGs and gain self-sufficiency.

183 Ibid.

184 Nwagbar, Eucharia N, Abia Raphael P, Uyang Francis A & Ejeje Joy A, 'Poverty, Environmental Degradation and Sustainable Development: A Discourse' (2012) Volume 12 Issue 1 Global Journal of Human Social Science Sociology, Economics & Political Science.

this vulnerability to changes in the environment through measures and activities at the community level.¹⁸⁵ The project has identified that adaptation of climatic variability can be achieved from the grass roots level- upwards. Since the rural poor; and particularly those involved in subsistence rain-fed agriculture are the most vulnerable to prevailing climatic variations, the project aims at introducing adaptation mechanism to this target group in a bid to increase agricultural productivity and improve the overall rural livelihood.

The CARLA project supports various measures aimed at empowering rural communities to adapt to climate variability and address the issue of environmental degradation. Such mechanisms have included capacity building for rural communities; community research; and community sensitization.¹⁸⁶ Other measures include the dissemination of best practices; development and implementation of community climate change action plans; distribution of guidelines on climate change and the training of national and districts staff for sustained implementation of project activities.¹⁸⁷

Several regions in Malawi have been adversely affected by changing climatic patterns. However, the CARLA project identified six (6) districts namely Nsanje, Dedza, Karonga, Zomba, Chikhwawa and Salima which are highly vulnerable to the adverse effects of climate change.¹⁸⁸ Statistics indicate that the identified districts experience higher temperatures and altered rainfall patterns that have resulted in a shorter growing seasons in the agricultural districts.¹⁸⁹ The shorter growing seasons and the continuing adverse climatic conditions have adversely affected small-scale subsistence farmers who in consequence been identified as the target group in the identified districts.

185 Ibid.

186 Yifan Ding, 'Impact of Poverty and an Inability to Manage the Environment' (2010) *Environment and Development* Volume 1, 267, available at <> (accessed 1 July 2015).

187 Ibid.

188 Ibid.

189 Ibid., page 8.

The expansion of the project to other regions of the country is expected to be facilitated by networking mechanisms led by Non-Governmental Organizations, local community organizations and interested firms in the private sector.¹⁹⁰ The national Government, through relevant ministries, is also expected to facilitate the expansion of the project to other regions of the country.

Accordingly, the participation of these vulnerable communities was identified as being vital to the success of the CARLA project. In this regard, the participatory adopted comprised two components which target distinct levels of the community. Firstly is the community level approach which comprises activities based on community ownership and leadership.¹⁹¹ The sense of ownership of the project by the community was identified as an integral element that would determine the reception and eventual success of the project in the identified district. Moreover, it was argued that the acceptance of the project by the leadership of the identified communities would contribute positively to the acceptance of the project by other members of the target communities.

The second approach is the capacity-building approach.¹⁹² This approach entails the involvement of the target groups and or communities in detailed design in the capacity-building program.¹⁹³ This approach involves the equipping of the rural population with the knowledge and skills required to combat the adverse effects of climate change to their livelihoods. The overall planned approach to capacity building is in its very nature participatory.

Several factors have been identified as the performance indicators of CARLA's project for instance increased resilience of local communities to agricultural practices and variability of natural resource base. Moreover, there is increased income in the local communities due to increased agricultural productivity.¹⁹⁴

190 Ibid.

191 Ibid.

192 Ibid.

193 Ibid.

194 Supra, note 41, page 10.

4.6 Conclusion

The foregoing chapter has entailed a review of projects in Malawi that have been aimed at combating poverty among the rural poor while also preserving the environment. The chapter has highlighted the goals of these projects and has noted the particular linkages between the said foals and the overall goal of sustainable development and poverty alleviation among the rural poor in Malawi. The following chapter entails an analysis on legal framework on economic development policy and that on biodiversity and environmental conservation in Malawi.

5.0. CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.1. Introduction

Human rights are now a well-established concept increasingly accepted by most democratic countries albeit begrudgingly. Nonetheless, governments find themselves constrained by the pace of population growth vis a vis consumption of natural resources. Moreover, the environmental concerns associated with extraction and exploitation of natural resources usually clash with the desire for economic growth and sustainable development.

As the world witnesses environmental degradation every day, having poverty alleviation and environmental conservation policies, legislations and rules is not a choice, but the very characteristic of every forward looking country. Yet, the picture is hardly rosy for Malawi. Strong legal and policy frameworks pertaining to environmental conservation and poverty alleviation are strangely absent. In most prevailing environmental conservation measures in Malawi, the dominant role is played by fragmented and ill-financed institutions.

In fact, insights from past environmental conservation and poverty alleviation measures exert a strong influence in the way the two aspects are perceived. Indeed, any environmental conservation and poverty alleviation model in which the environment policy's role is not well pronounced is likely to remain hollow and incomplete. It does follow from this assertion that this study posits that Malawi's national legal and policy framework is not sufficient to deal with contemporary environmental challenges.

5.2. DISCUSSION

The concept of guaranteeing environmental conservation as a means of poverty alleviation is suggested by this investigation to perhaps be a fruitful affair. Further consideration needs to be given on the sector and deduced applicability in the sector. The main subject of this research was

determining the role of environmental conservation on poverty alleviation in Malawi. The main idea is to find out if policies that guarantee environmental conservation have translation effects on poverty alleviation. The investigation seeks to discover whether growth in the dependent variable leads to significant changes in the independent variable. The study was limited to a specific country, Malawi.

The research questions posed were; Can environmental conservation be applied as a method of poverty reduction? and; In what ways can the environment be applied as a method of poverty reduction? The analysis into the research questions were performed in line with the parameters utilized to measure the dependent variable (poverty alleviation); legal and institutional framework governing environmental conservation and public awareness on environmental conservation.

The work carried on the research entailed gathering data from secondary sources relying on the journals and Malawi's government statistical databases. The data was then synthesized and analysed to deduce relationships between the independent and dependent variables. The research analysed some projects that were meant to ensure environmental conservation. Thereafter, the effect of the project in terms of poverty alleviation was assessed. The analysis was useful in proving the research hypotheses.

5.3. SUMMARY AND FINDINGS

1. The research has determined that deforestation and continuous cultivation of land creates conditions for severe erosion. Moreover, soil erosion is caused primarily by poor agricultural practices whereby farmers do not plant cover crops thereby rendering the soils friable. Consequently, ridging compacts the soil causing ridges hence creating the perfect conditions for excessive run off.

2. Environmental Impact Assessment

One of the contemporary issues pertaining to the management of natural resources is public participation. However, it is evident that public participation has been absent in most command and control or top-down approach.

Nonetheless, sound natural resource management requires a strong and efficient link among the multiple governance levels to facilitate maximum realisation of benefits accruing from the natural resources while at the same time ensuring their conservation. Therefore, there it is imperative to ensure that decisions articulated at the national, local and international levels are appreciated and supported by the public who reap benefits from the natural resources.

The downside is that the current provisions on public participation in natural resource management laws in Malawi are inadequate in content and efficiency. As such, the fruits of public participation are hard to realize because in the absence of meaningful public participation guaranteed in the legal and institutional framework.

Nonetheless, public participation in Malawi faces a number of limitations such as inadequate briefing of projects, tendency of local chiefs to dominate discussions thereby limiting the views of ordinary people. Lack of independent monitoring of public participation and high levels of illiteracy as well as low priority given to environmental issues affects the quality of public participation.

3. Legislation

The central aim of Malawi's legislative framework pertaining to environmental conservation is to implement a national environmental program that will ensure sustainable utilisation of the environment and natural resources thereby ensuring poverty alleviation. As such, the laws are formulated within a social, political, economic, and cultural framework prevailing in the country without compromising the principles of sustainable development.

The legislative framework is meant to provide access to environmental information, environmental justice and effective public participation in environmental decision making. Moreover, the laws need to be reviewed, formulated and updated to ensure contemporary issues pertaining to environmental conservation are tackled.

However, a critical review of Malawi's legal framework pertaining to environmental conservation shows some patent weaknesses. For instance, the legal framework does not provide a well formulated framework for punitive and incentive measures. Moreover, customary norms do not receive adequate consideration in environmental management despite the fact that they promote sustainable management of the environment.

Lastly, the legal framework does not provide a framework for encouraging maximum participation of individuals, communities and the private sector in the development of policies, laws and plans for the management of the environment.

4. Encroachment of the forest. The increase in population has led to encroachment of forests which has resulted to deforestation as people clear forest to prepare land for cultivation. Deforestation was noted as taking place in the riverine areas, open grazing areas, as well as arable lands.
5. Ineffective public participation, there is no communication cost and benefits of environmental projects
6. The constitution does not offer clear guidelines on whether laws of equity are applicable in Malawi and the extent of their application.
7. There is absence of political will in environmental conservation. Moreover, there is absence of electoral justice whereby instances of electoral malpractices are visible during general elections thus denying the populace the ability to choose the best leaders.

5.4. RECOMMENDATIONS

SHORT-TERM

Strengthening the Role of Farmers

Farming is the mainstay of a majority of people in Malawi hence strengthening the role of farmers in the development agenda will help reduce poverty and guarantee sustainable development. This can be achieved by:

- I. Promoting sustainable farming practices such as zero grazing, poultry farming and mixed farming for instance planting maize and beans where the legumes in the beans provide nutrients to the soil.
- II. Developing a policy framework that provides incentives and motivation among farmers, and enhances participation of farmers in design and implementation of policies. The government can facilitate the creation of representative organisations such as SACCO's or community based organisations and bring experts who teach farmers of the best farming practices such as greenhouse farming, horticulture and zero grazing. The government can then assist in providing market for the produce thereby empowering the farmers and encouraging environmental conservation.
- III. Introducing and strengthening policies that encourage self-sufficiency in low input and low-energy technologies for instance include pricing mechanisms that internalise environmental costs.
- IV. The Ministry of agriculture in collaboration with the ministry of trade and ministry of foreign affairs should assist farmers in marketing their produce. For starters, the ministry of Agriculture should assess the market for the locally produced agricultural farm produce then

send extension officers to rural areas to teach farmers on the best farming techniques that match international standards. This can be done by forming SACCOs, so as to ensure collaborative effort of the farmers. The ministry of foreign Affairs can source market for the farm produce which will consequently create jobs for most farmers thereby empowering them.

Recommendation

The government, through the Ministry of Finance should give sufficient budgetary allocation to the ministry of planning to assist in:

- a. Developing sanitation master plans and providing environmentally friendly services to district, town and city assemblies.
- b. Improving water borne sanitation systems and solid waste disposal using appropriate technology as well as proper design, selection and licensing of disposal sites and routes.
- c. Enforce existing policies and laws through strengthening institutional capacity and mechanisms for compliance. The enforcement can be achieved in collaboration with the municipal councils and the police force.
- d. Facilitate adoption of systems that sort industrial, clinical, domestic and other waste at source in order to facilitate recycling of materials wherever possible. The government should consider sourcing funds from donors to assist in this noble venture.
- e. Facilitate privatisation of waste management. The ministry can give private companies licences to collect and dispose waste. However, the licences should be granted after agreeing on the charges for waste collection so the companies do not extort the populace.
- g. Strengthen the health inspectorate for urban and rural areas in order to assess the risks and consequences of environmentally related health problems. This calls for budgetary allocation from the national government to train and employ enough personnel to adequately undertake inspection.

h. The Ministry of Health in collaboration with the Ministry of planning should undertake audits on a time-to-time basis to ensure all hospitals, clinics, public places and residential areas have appropriate sanitation and waste and effluent disposal systems.

Environmental Impact Assessment

In order to ensure that the main issues related to natural resource exploitation are addressed, it is important to come up with a framework to encourage public participation in the governance of natural resources. Going by its prominence in both national and international frameworks, it is a matter of debate whether it should be treated as a right rather than a privilege. Public participation is said to be a two-way communication and collaborative problem solving with the goal of achieving better and more acceptable decisions, based on the belief that those who are affected by a decision have a right to be involved in the decision-making process.

To develop, regularly review and administer guidelines for Environmental Impact Assessment (EIA), audits, monitoring, and evaluation so that adverse environmental impacts can be eliminated or mitigated and environmental benefits enhanced.

5.4.2. MEDIUM-TERM

Corporate Governance

Malawi's corporate governance structure is weak as was illustrated in chapter four of this thesis. As such, the following recommendations are proffered to enable it be in tandem with global good corporate governance standards:

a). The parliament should amend the Company's Act to ensure it expressly empower courts to assess fines on a case by case evaluation especially on matters of environmental degradation as the embezzled amount could far exceed the fine or conversely, the courts could reduce the amount of

fine if in the circumstances the breach is not serious. This position has been adopted by the courts in the UK case of *R v Thames Water Utilities (2015)*. Further, a ‘one size fits’ all policy approach to corporate governance is discouraged by the **OECD**.

b). Locus standi is established with the leave of the court. The scope should be expanded to include often due to the large economic impact actions of a company may have e.g. those that provide utilities.

c). It is recommended that sanction provided under company’s Act be more effectively applied even with companies that have not been listed in the securities exchange.

d). In the **United States**, the equivalent of the Office of Director of Public Prosecutions is empowered to investigate white collar crime (including asset chasing and recovery) with specialized support mechanisms. The sanctions under Malawian laws cannot be adequately enforced if there is laxity and ambiguity regarding the institutions empowered to enforce these sanctions.

e). **Commonwealth Association for Corporate Governance (CACG)** has encouraged states to consider regulating corporations in so far as environmental protection is concerned within the scope of corporate governance regimes. Therefore, Malawi should consider including environmental considerations in its corporate governance structures especially with Uranium and oil exploration around Lake Malawi.

f). There are contributions that can be made through domestic politics. There are several examples of taxation that can be levied on activities that place a burden on the environment. By implementing more comprehensive taxation systems, it is possible to shape society with a long-term view. For instance, Malawi can include a carbon tax on companies that contribute immensely to environmental degradation. Moreover, Malawi should consider introducing compulsory corporate

social responsibility in Government Corporation and define its scope so that CSR goes further than just providing desks for schools

Environmental planning

There is need to ensure that district and national development plans integrate environmental concerns in a bid to guarantee sensitivity to local concerns and improve environmental management.

5.4.2. Recommendation

- d) There is need to regularly review NEAP in order to assess and identify the central environmental concerns facing the country. The review is useful in providing a framework for integrating environmental concerns into development plans and programmes
- e) Review environmental plans at both national and district levels and if necessary revise the Environmental Management Act to align it with the Local Government Act and the National Decentralisation Policy.
- f) Develop strategies for controlling, preventing, adapting and mitigating any adverse impacts on the environment.

5.4.3. Long-Term

1. Electoral Justice

Environmental conservation and poverty alleviation is multi-dimensional and requires political will to help mitigate the effects of changing environment. The overwhelming scientific evidence of potential effects of environmental degradation should serve as a wakeup call for government to move from an economic to a sustainable development model. At the national level, political will is necessary to implement societal and educational measures and implement robust environmental policies governing land-use, energy efficiency procedures and pollution.

Sound leadership and political will have a profound effect on the general population to approach environmental challenges with sound sense, planned, and prepared responses. However, most politicians in Malawi avoid environmental conservation topics and choose to pursue economic development coupled with corrupt activities. As such, there is need ensure electoral justice because the electoral process is a fundamental mode of holding leaders into account. The electoral system in Malawi has its fair share of challenges with isolated cases of violence, illegal use of state resources in campaigns and the media failing to provide equitable access to all parties. Therefore, it is imperative that the civil society and other stakeholders champion for electoral reform if political will is going to be used to champion for environmental conservation and poverty alleviation.

Incorporate local Authorities in supporting local agenda 21

Since most of the problems and solutions addressed by agenda 21 (a non-binding action plan of the United Nations with regard to sustainable development) originate in local activities, the cooperation and participation of local authorities is a major factor in fulfilling its objectives. The governance of local authorities is closest to people hence they play a vital role in mobilizing, educating and responding to the public to promote sustainable development.

In collaboration with the public health, the local authorities should be encouraged to develop, implement and monitor programs that ensure that the vulnerable members of the society such as youth and women are represented in decision-making, planning and implementation processes through:

- i. Malawi should consider a Constitutional amendment to incorporate the one third gender rule akin to the Kenyan constitution that makes it mandatory that no public entity should have less than one third of either gender. Increasing the number of women decision makers, technical advisers, planners, managers and extension workers in environment and development fields will ensure their interests are catered for.

ii. Formulating and implementing clear government policies and national guidelines, strategies and plans for achievement of equality in all facets of the society for instance by promoting women's literacy, training, education, health and their participation in environmental conservation as it pertains to access to resources, and access to credit particularly in the informal sector for instance lowering the grades required for girls to join universities.

iii. To implement, as a matter of urgency, in accordance with country-specific conditions, measures to ensure that women and men have the same right to decide freely and responsibly the number and spacing of their children and have access to information, education and means, as appropriate, to enable them to exercise this right in keeping with their freedom, dignity and personally held values.

Practical implications

The research has several practical implications. One crucial practical implication is the fact that it instigates the questioning of the necessity of favourable environmental conservation policies for poverty alleviation. The environmental conservation measures in Malawi, by default of technological advancement and population growth, may have outgrown the present environmental policies as set out. This realisation forces economic think tanks, policy makers and the government to assess costs of the policies existence as opposed to the benefits accrued. A detailed look into such an analysis may cause the removal of such policies and the reallocation of capacity and infrastructure dedicated to upholding such policies to more important and urgent use.

Another practical implication of this research is the light it shines on the question: what factors should be most considered to improve the dependent variables? Essentially, the research will encourage legislators to put more emphasis and enact legislations that prevent rather than mitigate environmental degradation. The legislator and economic think tanks could also consider the policies that would allow the economy and sector to extract the most need aspects that would reinvigorate

growth in the dependent variables. For instance, limiting rural urban migration by providing job opportunities in rural areas and encouraging family planning.

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