ENFORCEMENT AND IMPLEMENTATION OF ENVIRONMENTAL LAWS AND THE PROTECTION OF MINING AREAS IN TANZANIA: A CASE STUDY OF MERERANI

ENFORCEMENT AND IMPLEMENTATION OF ENVIRONMENTAL LAWS AND THE PROTECTION OF MINING AREAS IN TANZANIA: A CASE STUDY OF MERERANI

By

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A Dissertation submitted in Fulfilment of the Requirement for the Award of Masters of Laws (International Law) of Mzumbe University

2013

CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University, a dissertation paper entitled enforcement and implementation of environmental laws and the protection of mining areas in Tanzania: a case study of Mererani, in fulfillment of the requirements for award of the degree of Master of Laws (LL.M) of Mzumbe University.

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DEDICATION

I dedicate this dissertation to my late uncle, **Mr. Nathanael Ngobei**, who really inspired me to love education and educate me how to stand strongly on a right decision regardless of the cost it incurs. Now I proudly say," my beloved uncle you really showed me the beauty of life by educating me. I am sure you will be smiling for me now. May the Almighty God rest your soul in eternal life.

ABBREVIATIONS AND ACRONYMS

BCSD	Business Council for Sustainable Development
CAP	Chapter of the Laws
CSD	Commission on Sustainable Development
DoE	Directorate of Environment
EA	East Africa
EIA	Environmental Impact Assessment
EU	European Union
FEB	February
IBID	Ibidem
ICC	International Chamber of Commerce
ICJ	International Court of Justice
IGOs	International Governmental Organizations
ILO	International Labour Organization
IMF	International monetary Fund
IMO	International Maritime Organization
MEAS	Multilateral Environmental Agreements
MISC	Miscellaneous
NEAC	National Advisory Committee
NEAP	National Environmental Action Plan
NEMC	National Environmental Management Council
NO	Number
OP. CIT	In the work cited
OECD	Operation of Economic and development
PARA	Paragraph
P	Page
RE	Revised Edition
S	Section of the laws

UN	United Nations
UNCED	United Nations Conference on Environmental Development
UNCLOS	United Nations Convention on the Law of the Sea
UNCSD	United Nations Commission on Sustainable Development
UNCTAD	United Nations Conference on Trade and Development
UNCTC	United Nations Centre for Transnational Corporations
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNIDO	United Nations Industrial Development Organization
VOL	Volume
VPO	Vice President's Office

ABSTRACT

The ecological problems in mining areas in Tanzania are increasing despite of the existing environmental laws. The research proves laws are ineffective to curb the environmental problems. This ineffectiveness of the laws is evidenced by increasing environmental degradation. Thus, the dissertation dealt with the critical analysis of the enforcement and implementation of environmental laws in Tanzania. The research also includes international environmental laws as Tanzania is a signatories of various international environmental treaties, participate in various global environmental conferences where declarations were made, aiming to protect environment.

The research paper has a total of six chapters. The research at chapter one gives the general introduction of the research paper, this includes background, statement of the problem, hypotheses, objectives, significance of the research, literature reviews and research methodology. Chapter two is the conceptual framework whereby different concepts relating to the study have been discussed. Chapter three covers the international legal regime on environmental protection in mining areas. Chapter four has covered Tanzania laws on environment and environmental managerial structure in mainland Tanzania. Chapter five is the findings and analysis of the data collected. This main part forms the main body of the research paper guided by the four hypotheses for testing the objectives of the research. Lastly is chapter six which the researcher has come into the conclusion and recommendations to the problem. The materials used in writing this work were gathered by employing two techniques, these are; documentary review and field research. The research revealed that public officials entrusted on environmental protection have no commitment to perform their duties. Also, the law lack enabling provisions for enforcement and implementation of the laws. Lastly is the constitution which lack expressly provisions on environment. Inter alia it is recommended that the constitution to be amended and other laws to include exhaustive provisions addressing environmental protection in expressively manner and feasible enforceable.

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CHAPTER ONE
GENERAL INTRODUCTION

1.0 Introduction

"Mining inherently implies environmental degradation...It is not an environmentally friendly activity"[1]. Mineral resource activities affect all environmental media such as land, air, water, and associated flora and fauna as well as the human environment, individual health and safety, local community lifestyles, cultural survival, social order and economic well-being[2]. While the majority of the impacts of mining are said to be localized, mining can cause national, Trans-boundary and global environmental problems[3]. The exploration stage such as surveys, mapping, drilling, and alike stages generally produces the least pronounced effects. The impacts of the exploratory phase can displace people, foreclose alternative land uses, create social conflict, and, by building roads, open up sensitive ecosystems to unplanned population influxes[4]. Mining operation can destroy large areas of vegetation, topsoil and terrain, create hazards from excavations, landslides, slope failures, soil erosion, deprive ecosystems and other users of water through water intensive practices, produce noise, dust, human development disturbance, and quantities of solid waste in the form of tailings and waste rock disposal sites.[5] Laws regulating mining are increasing in scope and stringency, based on the new international paradigm of sustainable development[6]. For mining, this means focusing not only on traditional economic concerns, but also on new social, economic, and

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1 Cohen, Madeline(1996), A New Menu for the Hard-Rock Cafe: International Mining Ventures and Environmental Cooperation in Developing Countries, 15 STANFORD ENVIRONMENTAL LAW JOURNAL 130 p 135, 137

2 Ibid at p 34

3 Walde, Thomas, (1993) *Environmental Policies towards Mining in Developing Countries*, 10 JOURNAL OF ENERGY & NATURAL RESOURCES LAW 327 (1992); reprinted in 30 PUBLIC LAND & RESOURCES LAW DIGESTS 41.

4 Ibid at p 44

5 Ibid at p 47

6 Definition of the term sustainable development — from the World Commission on Environment and Development's (the Brundtland Commission) report Our Common Future (Oxford: Oxford University Press, 1987). *"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs."*

environmental concerns. This is the new economic concern aim to protect environment by advocating sustainability in any economic activities on environment. International environmental law is becoming a significant part of this changing regulatory framework, eroding state sovereignty over resources with new treaties, judicial decisions, regulations and practices of governmental.

Consistent with the rights preserved in The United Nation Charter,[7]mineral exploration is a national responsibility and national legislation governs all activities within a national jurisdiction. International activity has been substantially driven by the interest of international mineral companies, locally regulated by domestic legislation. Exception relate to areas which are clearly recognized as being of international interest embodied in negotiated and ratified treaties, and to areas which fall outside defined national jurisdiction, the two major areas defined are the Deep Sea and Antarctica. Over the past two to three decades other issues important to the mining industry have been included in international treaties, conventions and declarations. These include references to environment and to social contracts, all of which are relevant for companies operating beyond the borders of their country of origin.

However, recent decades have seen questions of environmental protection become significant issue for government and part of mainstream public debate. Most jurisdictions now have government departments and independent agencies dedicated to environmental protections, as well as public interest groups committed to raising the profile of environmental issues.[8] And with the advent of international environmental law in the late 19th century, environmental protection based on humankind's immediate self- interest gave rise to the first wave of environmental instruments. Its primary purpose pursued by those instruments was to maximize nature's resources in view of

[7] United Nations Charter of 1945

[8] Jane Holder and Marie Lee(2007), 2nd Ed, Environmental Protection , Law and Policy , Cambridge University Press p 57

their exploitation[9]. The need for protective measures become international wherever exploitation threatened natural resources beyond state boarders, particularly in the case of high sea fishing, whaling, and the migratory birds.[10] But in reality, environmental laws, its enforcement and implementation are critical issues, especially in developing countries including Tanzania. Most of these Countries adopted number of laws that attempt to address different environmental problems, but in real sense these laws cannot be effectively implemented neither enforced because they are not clear, not flexible and do not have effective mechanisms for achieving their stated goals[11] as of the nature of international law which is often referred as "soft law", that its enforcement and compliance is very week in general due to many grounds inter alia lack of political will, ineffective legal framework which do not addresses environmental issues in an appropriate manner, failure to include environmental issues in the national policy plans and planning processes and more worse lack of standing financial and human resources[12]

The challenge which also click the mind of the researcher is concern to applicability of international environmental law to mining companies operating beyond the borders of their country of origin, does international environmental law relevant to these companies? Does these companies adhere international environmental laws in the whole obedience of environmental protection? Do individual countries such as Tanzania incorporate or implement international environmental laws including some important international environmental principles in their domestic laws? This has been discussed logically in the research work. Therefore, this work provides inter alia a broad overview of the legal authorities relevant in mining environment such as municipal environmental laws, International environmental laws, and courts decisions. Finally, the researcher examined the soft laws of mining; these are Stockholm Conference, Rio Declarations, Agenda 21 and industry code in mining areas' protection.

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9 Ibid p 58
10 Ibid p 50
11 Ibid
12 Ibid

1.1 Backgrounds to the Problem

Traditionally, international law has taken a "hands-off" approach to mining. It is a general principle of international law that states have sovereignty that is, supreme, independent political and legal control over their own natural resources just as they do over persons, companies and other entities within their margins. Perhaps the most famous expression of this sovereignty doctrine is Principle 21 of the Stockholm Declaration which states "States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction."[13]This shows that international environment laws have no concern with the protection of the environment in mining within the border of a state. That no enforcement and implementation of the environmental laws in states, despite of the fact that, state is a main subject of the international law. The international law only functions when environmental impacts go outside the border of a state.

However, States may give up portions of their sovereign powers through long term practice of legal customs, through the development of general principles of a legal nature, through treaties and other binding legal agreements, and through judicial decisions. These new rules by which a state surrenders some of its right to do what it pleases and becomes bound to new conduct standards along with other States make up what is called "international law"[14].This international law including also environmental

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[13] Stockholm Declaration of the United Nations Conference on the Human Environment, in Report of the United Nations Conference on the Human Environment (Stockholm, Sweden, June 5-16, 1972), United Nations Doc. A/CONF. 48/14/Rev. 1 at 3 (1973), 11 ILM 1416 (1972).

[14] http://legal-dictionary.thefreedictionary.com/International+Law Definition of international law "The body of law that governs the legal relations between or among states or nations. To qualify as a subject under the traditional definition of international law, a state had to be sovereign: It needed a territory, a population, a government, and the ability to engage in diplomatic or foreign relations. States within the United States, provinces, and cantons were not considered subjects of international

laws whereas countries surrender some of its sovereignty by concluding various international environmental treaties. Tanzania is among of the countries concluded various international environmental treaties, participate in various international environmental conferences both region and globally.

However, networked integrated and adaptive approaches to implementation and compliance may be the signature of the emerging generation of environmental law. The first generation of environmental law saw the creation of specialist environmental administrations and the introduction of a suite of laws for them to administer on environmental impact assessment, pollution control, wilderness conservation and threatened species conservation. This was the generation of the 1972 Stockholm Conference on the Human Environment. The second generation of environmental law shift in focus to sustainable development, reflecting the increased participation of developing countries in international diplomatic initiatives on the environment. It signified attention to it ecosystem problems such as climate, biodiversity, desertification, and to international trade of harmful substances into developing countries, such as chemicals and hazardous waste. This was the generation of the 1992 Rio Conference on Environment and Development. The objectives established around these two global miles tones in environmental protection are still in the process of implementation. The last 40 years have seen an impressive number of agreements and undertakings that many, if not most, countries have signed up to and have committed to implementing nationally. There are many challenges and gaps in implementation that remain a growing gap between ambition and action on the ground. While these commitments remain the responsibility of the sovereign nations, there is the question of

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law, because they lacked the legal authority to engage in foreign relations. In addition, individuals did not fall within the definition of subjects that enjoyed rights and obligations under international law. A more contemporary definition expands the traditional notions of international law to confer rights and obligations on intergovernmental international organizations and even on individuals. The United Nations, for example, is an international organization that has the capacity to engage in treaty relations governed by and binding under international law with states and other international organizations. Individual responsibility under international law is particularly significant in the context of prosecuting war criminals and the development of international Human Rights."

how the international system can assist countries to address what has become known as the 'implementation gap'.[15]

On the other hand, the formation of the United Nations in 1945 established freedom of the individual and to the preservation of the rights of individual sovereign nations. [16]

Declarations of common to nations were identified as international treaties and accorded special significance under the Vienna Convention.[17]When treaties ratified by signatory nations, treaties entered as law, as customary international law, or as domestic law of individual countries in the manner decreed by that country's constitution. Notwithstanding, treaties were between sovereign states and enforcement mechanisms were slow and cumbersome for mining related activities are rarely implemented[18].

Hence, looking critically on the nature of the problem to a large extent is characterized by the nature of international law for lacking clear implementation and enforcement mechanism, then the responsibility of individual states to implement environmental laws to some extent is minimal rather than it could be expected. Also as it seen in principle 21 of the Stockholm declaration it suggests environmental degradation in mining areas is the result of the nature of international law which show less concern in mineral activities in a border of a state. This shows that protection of environment in mining areas is possible through domestic environmental laws.

1.2 Statement of the Problem

Tanzania proves poor mechanisms of environmental protection in mining areas, for the reasons of poor implementation and enforcement of the existing environmental laws.

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15 Gregory L Rose, Gaps in The Implementation of Environmental Law at The National, Regional and Global Level (at First Preparatory Meeting of The World Congress on Justice, Governance and Law for Environmental Sustainability at Kuala Lumpur, Malaysia 12-13 October 2011

16 Article 2 (1) of The Charter of The United Nations

17 Vienna Convention on the Law of The Treaties 1969

18 Supra note 1 at p 2

Poor mechanism in implementation and enforcement of the laws in mining areas is shown clearly in section 52 of the mining Act of 2010.[19] The law does not show enforcement of the laws and how the laws are going to be implemented to assure environmental protection. The said section in the Mining Act, 2010 provides mining activities should be done in a manner to ensure environmental protection in accordance with the Environment Management Act No 20 of 2004. But there is no enabling provision in the Act to make enforcement of these laws.

Part II, Section 8 of the Environment Management Act, No 20 of 2004 states obligation to give effect to environmental principles. This obligation is given to a person performing a public function to implement principles of environment management. Construing the intention of the law maker, this section covers to various authorities these include inter alia Courts and environmental tribunal. The said section states that obligation but no enabling provisions in the EMA to make enforcement and implementation of what is stated in the said provision. That, the section emphasis of sustainable management of natural resources that including minerals but poor enforcement and implementation of what is stated make no sustainable management of natural resources, hence the country still facing massive environmental degradation in mining areas. Section 72 of the Environment Management Act, No 20 of 2004 requires land users and occupiers to make improvement and nourishment of the land, and for using it in an environmentally sustainable manner as may be prescribed by the Minister. Section 171 (1) a to g and subsection 2 of the EMA states mandatory requirement to the Commissioner for Minerals through Sector Environmental Coordinator for mining to forward to the Council as public records, different copies of the documents so as the Director of the environment may give directive in consultation with the Commissioner

[19] Subject to the provisions of this Act and the Regulations the holder of a mining licence shall- (a) develop the mining area and carry on mining operations in substantial compliance with his programme of mining operations with due diligence; (b) demarcate and keep demarcated in the prescribed manner the mining area; (c) take all appropriate measures for the protection of the environment in accordance with the Environment Management Act; (d) implement the proposed plan for relocation, resettlement of, and payment of compensation to people within the mining areas in accordance with the Land Act.

for mineral sector pertaining to the implementation of the provisions on environmental management falling under the Mining Act, 1998. The only problem lacking is provisions to make enforcement and implementation of what the law states.

The international laws, especially that of treaty origin is self-enforcing and that compliance is achieved because it is the interest of the parties to do so. There is, he said, "no standing body of international law enforcement officers," despite pressures for its establishment.[20] Typically, these mining related treaties use very general language, lack of adequate enforcement regimes. This suggests that international law does not have enforcement mechanisms. Most of enforcement of international law is not done through enforcement mechanism institutions; therefore acts of enforcement are less visible at the international level than at the domestic level, then it is at the state expense to deal effectively with the problems emerging on their environment without relying on the enforcement from international community. In addition, international law is not enforced as often as domestic law.[21]

1.3 Objectives of the Research

General objective

The study is focused on the enforcement and implementation of environmental laws on protection of environment in mining areas. It intends to make a critical analysis of the existing laws on environmental protection.

Specific objectives

- To determine and analyze critically implementation and enforcement of environmental laws and the protection of mining areas in Tanzania; and research further reasons for poor and or non enforcement of environmental laws in Tanzania.

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[20] FL Kigris (1996), Chair of the ASIL Insights Advisory Committee has referred to the popular assumption that International law cannot be enforced.

[21] O' Connell, Mary Ellen (1995) "Enforcement and the Success of International Environmental Law", Indiana Journal of Global Legal Studies: Vol. 3: 1ss.1, Article 4.
Available at: http://WWW.repository. Law, Indiana. edu/ ijgls/ Vol 3/ iss// 4

- To find possible means of putting into practical enforcement mechanisms of international environmental laws in Tanzania.
- To determine implementation of the "best practice principle in environmental management" in mining industry.

1.4 Significance of the Study

- The research has important to the whole international communities and individual nations as it explains protection of mining area and emphasis mining in sustainable manner.
- The research explains weakness on the laws concerning environmental protection in mining areas in Tanzania.
- The researcher suggests probable means of enforcement and implementation of international environmental laws in individual state.
- The research is useful and it contributes challenges as well as new knowledge to scholars, students, environmentalists, and legal experts in the field of environmental law.

1.5 Hypothesis

The researcher was guided by the following hypotheses:

i. The enforcement and implementation of environmental laws in Tanzania is weak to protect mining areas.
ii. Tanzania mining laws do not employ well and sufficient provisions in protecting environment.
iii. Tanzania environmental laws lack enforcement on precautionary measures.
iv. Poor means of enforcement has led to impracticable of sustainable development in Tanzania.

1.6 Literature Review

Various authors have written about environmental protection in developing countries. Some scholars have reflected the problems and hardship faced by most of these

countries on pollution prevention and land degradation due to various economic activities, including exploration of natural resources such as minerals. Most literatures have covered the general problem of environmental protection, but, there is a gap on literatures addressing particularly the protection of mining areas especially to the territorial sovereignty of the states.

In Tanzania this gap continues, the researcher aimed to address the problem of land degradation in Mererani areas for the well ground that most of the companies involving in mining activities are not complying with the mining laws. The researcher discussed critically the literatures which covered the environmental protection. Though most of the literatures did not point out directly to the mining areas protection, but it covers generally the question of enforcement and implementation of international environmental law in the issues of environmental protection. The researcher believing mining area is part of environment, these include:-

Eric L Garner Am[22] contested that international law which include treaties govern mining activities only in relation to areas of the World recognized as international in status, such as High seas areas and Antarctica region, being outside the territorial boundaries of any sovereign states. He went further to argue that notwithstanding, treaties were between sovereign states, its enforcement mechanisms were slow, cumbersome and for mining related activities, rarely implemented. This literature of the author named herein above is important in the study as it suggests with no question lacuna which international environmental law has in the protection of mining areas. The author did not articulate a single word in matter inter alia protection of mining areas out limit of the areas with international status. This is the weakness the author left which show how international law never put concern in protection of mining areas within states jurisdiction. This might be for the reason of the doctrine of state sovereignty but international law should at least alert state on matter of the environment

[22] Eric L Garner AM, Environmental and Engineering Geology – Voll 111- International Treatise's Governing Mineral Exploration at p 2

protection basing on the impact of the pollution and other environment problem which can not only affect individual states, but it may affect other states beyond the boarder of the pollutant state.

Aleixandre Kiss, and Dinah Shelton[23] viewed that international environmental law places emphasizes on national measures of enforcement they add that international environmental law requires implementation and enforcement at the national level that states to take appropriate action in domestic legal systems to enforce the laws they enact pursuant to international obligations, they cited UNCLOS, as an example which requires states parties to enforce their laws and regulations and take other measures necessary to implement applicable international rules and standards as per Articles 213-220 of the UNCLOS; this helped the researcher to develop critical analysis on the weakness of international environmental law in the question of enforcement and implementation as this requires does not show how or does not show mechanisms which international law could be practical enforced and implemented at national level in various environmental issues. This literature is also useful to the researcher as it suggest the need of finding whether enacted Tanzania environmental laws are enforced pursuant to international obligation. They added that what is known about the environment also suggest that the solution to environmental problems lies in the management of natural resources. To be efficient, such management must be international and continuously supervised. For this, as well international organizations are crucial. They believed that international organizations representing the common interests of mankind can best integrate and respond to the interdependent issues of environmental quality development, product control and energy resource management. The author has positive thought and useful in the field of international environmental laws but with that advantage at the priority of the common interest and not other resources not follow within the meaning of common interest.

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[23] Alexandre Kiss and Dinah Shelton, International Environmental Law, 3rd Edition Cambridge University Press p 228-230

Philippe Sands[24] viewed that as the principal subjects of international law, states have the primary role in enforcing rules of international environmental law, add that, to be in a position to enforce a rules of international environmental law, a state must have standing, and to have standing it must be able to show that it is, in the words of the international law commission (ILC), "an injured state" The author threw well his views but left challenges' that only injured states can enforce international environmental laws, that show enforcement is required only after effect occurred. The author is much concern with the treatment of the outcome rather than the effective preventive measures pertaining to the problem. While in real sense precautionary principle is of great importance when it comes to the matter of environment protection in its generality.

Whybe Th. Douma[25]believed that effective increase the enforcement powers at local level a coordinated cross-sector approach respective to the local and thematic context has to be taken. This means the triggering of international private sector regulation mechanisms, such as the OECD national – contact points and inspection panel of multilateral financial institutions, building connections to intergovernmental investigation and inspection organizations (for example IMPEL, Euro just) and the inclusion of nongovernmental organizations for improved reporting and verification. These efforts should be connected to the political process and compliance mechanisms inside the respective MEAs conferences of the parties. In all these approaches affected communities have to be, as far as possible, the integral part of the capacity building measures and enforcement actions. The text emphasize on the usefulness of the local laws on fighting against environmental problems, hence the book helped much to this study as it point out the relevant mechanism on the implementation and enforcement of the laws on environment. But the gap is still in existence as the author failed to show how possible environmental laws can be successive enforced and implemented in individual state.

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[24] Philippe Sands, Principles of International Environmental law 2nd Edition Cambridge University Press p 171-182

[25] Wybe Th. Douma, The Hague Environmental Law Facility Report of June 2010 p 3-4

Andrew W. Samman[26] said that there is a flurry of international environmental lawmaking efforts already underway. If these laws are to be successful, however, enforcement mechanisms must be established. This literature is important as it shows weakness international environmental laws have for lacking enforcement mechanisms to ensure implementation of these laws in domestic legal systems. But also it put emphasis on the enforcement and implementation of international environmental law in protection of environment, including mining areas.

O' Connell, Marry Ellen[27] believed that enforcement is what happens when regulated bodies fall short of full compliance with environmental law, added that enforcement requires resources. Professor Cannel went on to say that, international environmental law is generally obeyed and its enforcement is based primarily on compliance, not enforcement. Most enforcement of international law is not done through enforcement institutions. Therefore acts of enforcement are less visible at international level than in domestic level.

O'Connell meanwhile left one question that "does this mean that international law generally, and environmental law, is unsuccessful? He respond himself that international law is a monument to successful laws, without much enforcement. O' Connell believed that international environmental law is less well-suited to enforcement than other areas of international law. O' Connell believed that emphasizing enforcement could actually make international environmental law less, not more successful. O'Connell went further to argue that although international law has enjoyed success with less enforcement to date, times are changing. Certain aspects of international law leave some rules unsuited to coercive enforcement, but other rules are suited to enforcement through the use of domestic enforcement mechanisms. This argument will work in this study as it will enables researcher to analyse in what manner international

[26] Andrew W. Samman, Enforcement of International Environmental Treaties: An Analysis, 5 FORDHAM ENVTL. L.J. 261 (1993)

[27] O' Connell , **op cit** Pg 4

environmental law can be practically enforced and implemented in individual states especially developing countries whereas environment is well humiliated.

In trying to show what enforcement mean, O'Connell quoted Dictionary meaning that "is the compelling of obedience to law''[28] In domestic legal systems, the executive or judiciary enforce the law generally by imposing sanctions on those who disobey the law. Domestic system may do this by controlling the assets, freedom, or the very existence of law breakers.[29] This is lacuna international environmental law has as it lacks executive or judiciary to make possible enforcement and implementation of international environmental law.

In the case of **Hilao v Estate of Marcos**[30] suggest even further possibilities for enforcing environmental law than do the war crimes cases, in this case citizens of the Philippines, who were abused or whose relatives were murdered at the hands of Fidel Marcos and his subordinates, successfully brought a class action suit in U.S. District Court for violation of their human rights. The plaintiffs were awarded $1.2 billion as a class, and the defendants were ordered to assist in revealing the whereabouts of assets, including providing information about accounts in Switzerland. This judgment overcame many obstacles to the successful enforcement of international law. First, the court found that the Marcos government did not enjoy sovereign immunity for its violations of important rules of international law."[31] Second, the court found no forum non conveniens problem because the Marcos family held assets in the United States. Third, the Alien Tort Act provided a cause of action by permitting the Filipino citizens to sue in the United States for violations of international law.[32] The **Hilao** court stated that aliens could sue in the U.S. courts for violations of international law that are

[28] Black's Law Dictionary 528 (1990)
[29] Anthony D' Amato is international Law Really "Law "? 79 NW. O. L Rev. 1293, 1304 (1984-5)
[30] Hilao,25 F.3d at 1467

[31] Ibid at p 1471-72.

[32] *Hilao,* 25 F.3d at 1475-76 (referring to the Alien Tort Act, 28 U.S.C. § 1350 (1989)).

"specific, universal and obligatory."[33] This holding is germane because international environmental law could fit within this rubric. This case is useful in the study as it shows lacuna in the enforcement of international environmental law, the case show the difficulties court face in enforcement of environmental law as it explain the doctrine of forum non convenience which creates an additional barrier to the enforcement of international law, as many countries require that the forum in which the case is brought be "convenient". For many courts, this rules out applying international law because international is not the law usually applied by the court and is, therefore, not convenient. Some courts also refuse to decide questions which they consider "political" or which interfere with the executive's ability to carry out foreign policy. This type of prudential barrier eliminates many international law cases because they inherently touch on foreign affairs[34].

The attempt to create general binding rules at the conference on Environmental and Development in Rio de Janeiro failed.[35]Instead, "soft law" documents were produced which were not subject to enforcement[36] , this document is essential and useful in this study as helped in making analysis of the enforcement of the International environmental law which the researcher believe it is a lacuna which is also an obstacle towards successful protection of environment.

Jane Holder and Marie Lee[37] believed that environmental legislation is and will remain an important pillar of the community's approach to achieving its environmental objectives, and one of the strategic priorities for the coming decade is to tackle the significant implementation failures we face in a number of areas. They added altogether

[33] Ibid.at p 1475.

[34] For a complete discussion of access to U.S. Courts for enforcing international law, see Gary B. Born and David Westin , International Civil Litigation in the United States (2nd ed.1992)

[35] See Report of the United Nations Conference on the Human Environment, U.N. DOC. A /CONF. 48/14/Rev.1, U.N. Pub. E. 73, 11. A. 14,

[36] There is now a sizeable body of literature on "soft law". For one of the first, and still one of the best, articles, see Oscar Schachchter, Twilight Existence of Non – Binding Agreements, 71 AM. J. INT'LL

[37] Jane Holder and Marie Lee, Environmental Protection, Law and Policy, (Text and Materials) 2nd Edition Cambridge University Press p 198

that it is mistake to think that putting the law in place is the end of a process, or the solution to a problem, it is just the beginning. In deed when we look at the persuasion and negotiation that goes on in regulation, the language of command and control begins to look ironic. This is a rhetorical accomplishment which has no real basis, a very little commanding and controlling actually goes on in the implementations of environmental regulations.[38] This is a resourceful literature as it encourages implementation as a significant way to end up misery in environmental matters including mining issues.

Ian Mann (2009)[39]

Ian believed that environmental problems, such as pollution cannot be addressed by individual countries in isolation, they have to collaborate. Therefore to him international organizations, and international law, provide an effective mechanism for developing joint approaches that deal with the national and regional elements of an environmental problem at the same time. This literature shows how the author accept cooperation between countries in solving environmental problems that he acknowledge important of international law as well as international organizations. On the other side this literature left a lacuna as the author only ending saying that international law and international organizations provide an effective mechanisms for developing joint approaches that deal with the national and regional of an element of environmental problems . The author failed to show how international laws and international community's ensure enforcement and implementation of environmental laws in individual countries in solving various environmental problems.

Michael Faure (2010) [40] said that those addressing problems of environmental degradation in developing countries, policymakers and scholars have neglected the

[38] Ibid p 463

[39] Ian Mann, (2009), A Comparative Study of The Polluter Pays Principle and its International Normative Effect On Pollutive Processes, British Virgin Islands p.21

[40] Michael Faure, Et al, (2010), Bucking The Kuznets Curve: Designing Effective Environmental Regulation In Developing Countries, Virginia Journal Of International Law Vol. 51:95;

important question of regulatory design. While a country's long-term improvement in environmental conditions almost certainly depends on improving its economic position, in the short to medium term, the quality and type of environmental regulation can play a significant role in determining regulatory effectiveness.

Faure further commented that much of the research done in developing countries into the failures of environmental regulation has focused on implementation and enforcement problems. The primary reasons for such regulatory failure is that policymakers have not paid enough attention to designing regulation appropriate to the legal, economic, political, and social situations in which they must function.[41]This literature is useful in the study as it shows how the author acknowledge that there is a problem of enforcement and implementation of environmental laws although he did not take concern on that rather than on regulatory design. This is the lacuna the author left because regulatory design is mean less if there is no mechanism to put those regulations into practice that is enforcement and implementation of the laws.

Orlando E. Delogu and Hermann Soell (1976)[42] believed that the growing range of environmental problems are acute and must be dealt with by governments if society is to be preserved. The role of government is almost always seen in the context of regulation the establishing of some sort of administrative mechanism to enforce, allocate, and suggest further limitations all designed to reduce the magnitude of a problem to acceptable levels. This literature is useful in the study as it shows the need of governments to put much concern in the environmental problems to preserve a society by establish administrative mechanisms to enforce the laws.

[41] Takdir Rahmadi, Toward Integrated Environmental Law: Indonesian Experiences So Far and Expectations of a Future Environmental Management Act, in Environmental Law In Development: Lessons From The Indonesian Experience 128, 130-33

[42] Orlando E. Et al, (1976) Fiscal Measures for Environmental Protection Two Divergent Views: Tax Policy and Environmental Objective, IUCN Environmental policy and law paper, no11, pp. 8-13, Morges Switzerland

1.7 Research Methodology

This part is about the framework in which the study was carried out. This is an important research part which explains about the research design, area of the study, study population, sampling technique and procedure, data collection and data analysis.

1.7.1 Research design

This study was designed to take a case study design. The start of the study is a brief overview of the enforcement of the environmental laws and its implementation in protecting mining areas, the area selected as a case study is Mererani which represents mining areas in other developing countries which the activities cause land degradation to a large scale together with various kinds of pollution such as soil pollution, air pollution as well as water pollution to mention few. An analysis of the international environmental laws and local laws was made, and this enabled the researcher to make generalization for the findings.

However, the researcher expected to apply different types of the research, these include: doctrinal research and empirical research. Starting with doctrinal research, the researcher used this type of the research because of the nature of the study itself. This type of research concerned with the proposition of law, by the way of analyzing the existing laws and cases by applying the reasoning power.[43] However non doctrinal research (empirical) was applied in this research. Empirical research relied on observation on the area of study this was applied in order to capture other factors (non legal factors) which contribute to the substantial environmental degradation.

1.7.2 Area of Study

The study took place in Dar es Salaam and Arusha. The choice of the City of Dar es Salaam is due to the fact that, the majority of the offices which were relied upon for

[43] Mynen, S.R. (2003). Legal Research Methodology (p.32). Fridabad (Haryana), Allahabad Law Agency, 2nd Edition.

information and data collection are located in Dar es Salaam, such as Vice President Office, Environmental Division, (VPO), which are policy makers and check out all matter concerning environment in Tanzania Mainland, National Environmental Management Council (NEMC), and Lawyers from Environmental Action Team (LEAT), Attorney General Office of Tanzania, Ministry of legal affairs, Tanzania Law School and Ministry of International Affairs. The choice of Arusha is due to the fact that there is a mining activity in Mererani and some important offices which data of this research were collected are located therein.

1.7.3 Study Population

The targeted population was both nationals and non nationals. Given the objectives of the research, this involved people of different professions; however lawyers were most targeted.

1.7.4 Sample Size

The study employed approximately the sample size of 100 respondents. This involved legal practitioners, authorities in mining sector and people having responsibility of environmental protection. Also local communities surrounding an area of study were involved.

1.7.5 Sampling Techniques and Procedures

The Researcher collected information from respondents on their attitudes and opinions in relation to the enforcement of environmental laws in protecting mining areas. The researcher used random sampling. This method was employed to extract data from various respondents in relevant areas of study. This method allowed every member of the population to have an equal opportunity of being included in the research so as to avoid bias. Therefore the selection pointed respondents from relevant authorities such as Vice President Office, Environmental Division, (VPO), who are policy makers and check out all matter concerning environment in Tanzania Mainland, National Environmental Management Council (NEMC), and Lawyers including lawyer from Environmental Action Team (LEAT), which is a Non Governmental organization dealing with environmental issues.

1.7.6 Data collection

The process of data collection was done in two stages namely library research and field research:-

1.7.6.1 Library research

As for library research, the researcher visited public and private libraries such as Mzumbe University library, University of Dar -es- salaam library, Tumaini University, Makumira University college library and others located in Dar -es- salaam and Arusha, whereby the analysis of the problem was done through statutes, cases, textbooks, journal, articles, reports on other related study, online information materials and other relevant materials expected to be found therein.

1.7.6.2 Electronic Sources

Internet search was employed, the researcher visited relevant website and environmental search engines with relevant information on environmental matters, online journals, reports and other useful materials was visited.

1.7.6.3 Field Research

The field research was conducted through the following ways:-

(i) Interviews

Interviews were a part of the researcher's field research. During field study the researcher interviewed different respondents. This method involved both structured and unstructured interviews. The structured interviews was conducted to the officials of the following authorities, Vice President Office, Environmental Division, (VPO), National Environmental Management Council (NEMC), and Lawyers including lawyer from Environmental Action Team (LEAT), which is a Non Governmental organization dealing with environmental issues.

The unstructured interviews was subjected upon mining workers and members of the parliament, National Environmental Action Plan, (NEAP) and National Strategy for Sustainable Development(NSSD) and other people in Tanzania about their opinions and recommendations on how the problem of land degradation in mining areas can be combated. This method was complemented with the use of questionnaires containing both closed and open ended questions depending on the availability and flexibility of targeted respondents.

(ii) Observation

Observation involved the researcher's personal view or observation of the attitude of the respondent towards the problem and more specifically the activities taking place in the area of the study so as to obtain information which may not be obtained through library research and interviews.

1.7.7 Data collection instruments

The following instruments were used for data collection:

1.7.7.1 Questionnaire

The researcher used questionnaire as an instrument to collect data from different Respondents. This method involved the distribution of questionnaires through various means to respondents. Questionnaires were distributed to some officials in Attorney General Office of Tanzania, Vice president Office Environmental registry, Ministry of legal affairs, and other people including lawyers and members of parliament. This method was expected to provide relevant information since respondents would have enough time to read and respond to the questions; also it less time consuming.

1.7.7.2 Interview schedule

The structured interview schedule was used to gather information from respondents during interviews. The structured interview schedule was based on the point of enforcement and implementation of the international environmental law in states. The

targeted people were professional in the field. This instrument is important since it facilitates collection of data located in someone's mind.

1.7.8 Data analysis

The collected data were examined in detail before going to its analysis. This was important to the researcher to determine whether the collected data supported both the formulated hypothesis and the objective of the study. The researcher used only qualitative data analysis in analyzing the collected data. Qualitative data analysis involved factual and logical interpretation, comparison and explanation of study findings. By using this method, the information collected through interview was broken down into smallest meaningful units of information. Those units was placed into appropriate categories then analyzed in detail by content analysis. Content analysis was done by analyzing the symbolic content of any communication. The intention of using content analysis was to reduce the total contents of communication to some set of categories that represented the objective of the study.

1.7.9 Limitation of the Study

The factors hindered the researcher in getting appropriate information relating to the research problem are as explained hereunder:

1.7.9.1 Availability of Respondents

Most of the respondents were busy in their day to day activities, this lead to postpone and non reply of the questionnaires collected before them. However in some areas it was difficult to get respondents. Some of the respondents were afraid to provide information with assumption that researcher is a spy who was sent to explore certain information.

1.7.9.2 Time and Financial Difficulties

The researcher had no enough money to travel in different areas. The researcher was required to pay fees to access different libraries for instance at the University of Dar es Salaam library.

CHAPTER TWO

CONCEPTUAL FRAMEWORK

2.1 Introduction

A conceptual problem which may arises in any study concerning the enforcement and implementation of environmental laws and the protection of mining areas can be the variations of concepts on the environment and the laws govern the environment. This can be the debate about different concepts on environment, different laws govern environment which includes both domestic laws and international environmental laws which it features mostly with numerous principles than any other field of international laws.

Therefore, the chapter provides a clear understanding of the various concepts on the applicable laws and practice relating to the environment protection of mining areas in developing countries principally Tanzania. The concepts and laws are as follows herein under:

2.2 Mining process

Mining is the extraction of valuable mineral or other geological materials from the earth from an ore body, seam or reef, which forms the mineralized horizon and package of economic interest to the miner[44]. To gain access to the mineralized package within the lease area it is often necessary to mine through or remove to the side waste material which is not of immediate interest to the miner.[45] The total movement of ore and waste, which also includes the removal of soil in some cases, is referred to as the mining process. The nature of mining processes creates a potential negative impact on the environment both during the mining operations and for years after the mine is closed. This impact has led to most of the world's nations adopting regulations to moderate the

[44] http://en.wikipedia.org/wiki/mining accessed on the 5 December 2012

[45] Ibid

negative effects of mining operations. Safety has long been a concern as well, though modern practices have improved safety in mines significantly[46].

2.3 Mining areas

Is interpreted to mean "an area of land subject to a special mining licence, a mining licence, or a primary mining licence"[47] In ordinary meaning this is an area where mining activities are conducted by those companies licensed by the respective authority. Fore example in Mererani area there are different mining companies grouped in their respective categories such Block 'A", "B", "C" and "D" in different areas.

2.4 Environmental effects of mining

Environmental problem in mining can include erosion, formation of sinkholes, loss of biodiversity, and contamination of soil, groundwater and surface water by chemicals from mining processes. In some cases, additional forest logging is done in the vicinity of mines to increase the available room for the storage of the created debris and soil. Contamination resulting from leakage of chemicals can also affect the health of the local population if not properly controlled. Extreme examples of pollution from mining activities include coal fires, which can last for years or even decades, producing massive amounts of environmental damage.

Mining companies in most countries are required to follow stringent environmental and rehabilitation codes in order to minimize environmental impact and avoid impacts on human health. These codes and regulations all require the common steps of Environmental impact assessment, development of Environmental management plans, Mine closure planning which must be done before the start of mining operations, and Environmental monitoring during operation and after closure. However, in some areas, particularly in the developing world including Tanzania, regulation may not be well enforced by governments.

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[46] Ibid

[47] The Mining Act No 14 0f 2010

For major mining companies, and any company seeking international financing, there are however a number of other mechanisms to enforce good environmental standards. These generally relate to financing standards such as Equator Principles[48], IFC environmental standards, and criteria for socially responsible investing. Mining companies have used this financial industry oversight to argue for some level of self-policing. In 1992 a Draft Code of Conduct for Transnational Corporations was proposed at the Rio Earth Summit by the UN Centre for Transnational Corporations (UNCTC), but the Business Council for Sustainable Development (BCSD) together with the International Chamber of Commerce (ICC) argued successfully for self-regulation instead.

2.5 Environment

A word environment commands a very broad meaning, according to Tanzania National Environmental Policy environment includes air, land and water; plant and animal life including human life, the social, economical recreational, cultural and aesthetic condition and factors that influence the lives of human beings and their communities, structures, machines and other devices made by man. This covers solid, liquids, gases odour, heat, sound, vibration or radiation resulting directly or indirectly from activities of man and any part of combination of the foregoing and interrelationships between two or more of them. [49] This definition is wide and inclusive as it covers all other definition of environment and brings clear understanding of the term environment.[50]

A legal definition of the "environment" is important to delineate the scope of the subject determine the application of legal rules, and establish the extent of liability when harm occurs. The English-language, the term "environment" is borrowed from an ancient

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[48] http:// www.equator- principles.com "The Equator Principles Financial Institutions (EPFIs) have consequently adopted these Principles in order to ensure that the projects we finance are developed in a manner that is socially responsible and reflect sound environmental management practices"

[49] Tanzania National Environmental Policy, 1997, see also Tanzania Environmental Management Act, No. 20 of 2004 which provide for the similar definition.

[50] http://dictionary.reference.com/browse/environment, see also, http://en.wikipedia.org/wiki/Environment both accessed on 5 December 2012,

French word "environner", meaning to encircle[51]. Most languages had to borrow or invent new terms when concern emerged about the potential destruction of natural resources and processes on which life depends. A program of UNESCO[52] uses the term "biosphere" to designate the part of the universe where, according to present knowledge, all life is concentrated. Webster's Dictionary[53] begins with a general definition of the environment, reflecting the original French meaning: "the circumstances, objects, or conditions by which one is surrounded." It continues with a more precise meaning: "the complex of physical, chemical, and biotic factors such as climate, soil, and living things that act upon an organism or an ecological community and ultimately determine its form and survival" to which it adds "the aggregate of social and cultural conditions that influence the life of an individual or community." The last definition is very broad and brings problems such as traffic congestion, crime, and noise within the field of environmental protection. In law, "environment" can refer to a limited area or encompass the entire planet, including the atmosphere and stratosphere. International legal instruments generally define "environment" broadly. A text of the European Community includes "water, air and land and their interrelationship as well as relationships between them and any living organism."[54]

The Espoo Convention on Environmental Impact Assessment in a Transboundary Context[55] and the European Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment[56] contain comprehensive definitions. The latter provides: For the purpose of this Convention . . .'Environment' includes: natural resources both abiotic and biotic, such as air, water, soil, fauna and flora and the interaction between the same factors; property which forms part of the cultural heritage; and the characteristic aspects of the landscape. Thus, the man-made environment,

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[51] Alexandre Kiss and Dinah Shelton, **op cit** p 228-230

[52] UNESCO,MAN BELONGS TO THE EARTH: UNESCO'S MAN AND THE BIOSPHERE PROGRAM (1988)

[53] "Environment" defined in *Webster's Ninth New Collegiate Dictionary* (1983).

[54] Article 2, Council Directive of June 27, 1967, O.J. L 196 (7/16/67).

[55] Espoo, Feb. 25, 1991

[56] Lugano, June 21, 1993

including structures and landscapes, can be considered a part of the environment to be protected. The International Court of Justice defines the environment to include a social dimension, stating that "the environment is not an abstraction, but represents the living space, the quality of life, and the very health of human beings, including generations unborn."[57]

2.6 Environmental laws

Broad definitions and the fact that all human activities have an impact on the environment make it difficult to establish the limits of environmental law as an independent legal field; indeed they imply the integration of environmental protection into all areas of law and policy. Environmental law springs from the understanding that the environment determines the form and survival of each organism and community; thus national, regional, and international efforts must be taken to ensure the continued viability of the planet and the sustainability of its myriad species, through holistic approaches such as integrated or ecosystem protection[58]

It can be defined that, environmental law is a complex and interlocking body of treaties, conventions, statutes, regulations, and common law that, very broadly, operate to regulate the interaction of humanity and the rest of the biophysical or natural environment, toward the purpose of reducing the impacts of human activity, both on the natural environment and on humanity itself.[59]

Environmental law can be grouped into two categories first is pollution control and remediation, and second resource conservation and management. Laws dealing with pollution are often media-limited that they pertain only to a single environmental medium, such as air, water soil, and control both emissions of pollutants into the

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[57] Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Rep. 1996, pp. 241-242, para. 29.

[58] Alexandre Kiss and Dinah Shelton, **op cit** p 3

[59] http://en.wikipedia.org/wiki/Environmental_law accessed on the 6 December 2012

medium, as well as liability for exceeding permitted emissions and responsibility for cleanup[60].

Laws regarding resource conservation and management generally focus on a single resource for instance natural resources such as forests, mineral deposits or animal species, or more intangible resources such as especially scenic areas or sites of high archaeological value and provide guidelines for and limitations on the conservation, disturbance and use of those resources[61].

Pollution control laws generally are intended to protect and preserve both the natural environment as well as human wellbeing. Resource conservation and management laws generally balance the profit of preservation and economic exploitation of natural resources on the environment. But all in all without even grouping or grouping, the laws are made purposely to protect the environment against adverse economic activities on the environment which affect the wellbeing of the people and other living organisms on the environment.

2.7 International environmental laws

The term International environmental law was defined by Dr. Birnie and Professor Boyle to mean "…the aggregate of all rules and principles aimed at protecting the global environment and controlling activities within national jurisdiction that may affect another state's environment or areas beyond national jurisdiction[62].From the observation point of view it seems that, when one defined environmental law at global level, it includes all rules, principles, treaties, common law, and customary which are used by the International community's to protect the world environment by controlling activities within municipal jurisdiction of states so to avoid negative impact to states.

[60] Ibid
[61] Ibid
[62] Supra note No 3 p 3

2.8 Sustainable development

In recent years, several initiatives have focused on the role of the mining sector in the context of sustainable development[63].There fore environmental protection including mining areas are represented in the development of the concept of sustainable development, of "triple bottom line accounting", of cleaner production, of life-cycle assessment to assess potential impacts, of the precautionary principle as defined in the Environment Protection and Biodiversity Conservation Act,1999 and of environmental impact assessment, to advise decision-makers and the broader community on the potential negative as well as positive outcomes of a proposed development. All of these are relevant to the mining industry, and extend from the pre-mine planning phase, through construction, mining, and mine closure to post-mine stewardship.

Sustainable development can simply be defined as a pattern of economic growth in which resource use aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but also for generations to come. The term 'sustainable development' was used by the Brundtland Commission which coined what has become the most often-quoted definition of sustainable development as development that "meets the needs of the present without compromising the ability of future generations to meet their own needs."[64] Alternatively, sustainability educator Michael Thomas Needham referred to 'Sustainable Development' "as the ability to meet the needs of the present while contributing to the future generations' needs." There is an additional focus on the present generation's responsibility to improve the future generations' life by restoring the previous ecosystem damage and resisting contributing to further ecosystem damage. The concept of sustainable development is often broken

[63] Defined in *Our Common Future*, also known as the Brundtland Report formulated by the Brundtland Commission, as 'development that meets the needs of the present without compromising the ability of future generations to meet their own need'.

[64] Ibid

out into three constituent parts: environmental sustainability, economic sustainability and sociopolitical sustainability.[65]

The United Nations 2005 World Summit Outcome Document refers to the "interdependent and mutually reinforcing pillars" of sustainable development as economic development, social development, and environmental protection. Based on the triple bottom line, numerous sustainability standards and certification systems have been established in recent years. Well-known standards include organic, Rainforest Alliance, fair trade, Bird Friendly, and The Common Code for the Coffee Community.[66]

2.9 Agenda 21

Thirty years ago, in Stockholm, they agreed on the urgent need to respond to the problem of environmental deterioration. Ten years ago, at the United Nations Conference on Environment and Development, held in Rio de Janeiro, they agreed that the protection of the environment and social and economic development are fundamental to sustainable development, based on the Rio Principles. To achieve such development, there was adoption of the global programme titled Agenda 21 and the Rio Declaration on Environment and Development where it was reaffirmed its commitment. The Rio Conference was a significant milestone that set a new agenda for sustainable development. Between Rio and Johannesburg, the world's nations have met in several major conferences under the auspices of the United Nations, including the International Conference on Financing for Development, as well as the Doha Ministerial Conference. These conferences defined for the world a comprehensive vision for the future of humanity.[67]

Therefore Agenda 21 is an 800 page blueprint for managing all sectors of the environment in the twenty- first century. Agenda 21 lists many of the action items,

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65 Available at http://en.wikipedia.org/wiki/Sustainable_development accessed on 28 /11/2012 at 15:30 pm.

66 Reinecke, J., Manning, S., Von Hagen, O. (2012). "The Emergence of a Standards Market: Multiplicity of Sustainability Standards in the Global Coffee Industry".

67 H.Jane & Maria L(2007),Environmental Protection Law & Policy, Text materials,2nd Edition, UK: Cambridge University Press, p 267.

some of them quite specific. Many of them also inspire to degrees of protection that are well beyond the existing capabilities of many states.[68] There was an adoption of Agenda 21 as an action plan and blueprint for sustainable development, was one of five documents adopted by more than 178 governments at the United Nations Conference on Environment and Development (UNCED), known as the Earth Summit, in Rio de Janeiro in 1992.[69] Apart from Agenda 21, the following documents were also adopted at the Earth Summit: The Rio Declaration on Environment and Development. Its 27 principles define the rights and responsibilities of nations as they pursue human development and well-being. A statement of principles to guide the management, conservation and sustainable development of all types of forests, The United Nations' Framework Convention on Climate Change ,The Convention on Biological Diversity.[70] These are the documents resulted from the United Nations conference on the Environment and Development.

2.9.1 Pollution

The question of how one defines the term' pollution' has been addressed in several international instruments. In a Recommendation adopted in 1974 by the Organization for Economic Co-operation and Development, pollution is broadly defined as 'the introduction by man, directly or indirectly, of substances or energy into the environment resulting in deleterious effects of such a nature as to endanger human health, harm living resources and ecosystems, and interfere with amenities and other legitimate uses of the environment. This definition was substantially reproduced in the Geneva Convention on Long-Range Tran boundary Air Pollution, 1979 and in the Montreal Rules of International Law Applicable to Tran frontier Pollution adopted by the International Law Association in 1982[71].

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68 Slowmanson R. (2003), Fundamental Principles of International Law, 4th Edition, USA: Thomson West Publishers, p 588.

69 http://www.environment.gov.za/enviro-info/env/summit.htm

70 http://www.environment.gov.za/enviro-info/env/summit.htm

71 Malcolm N. Shaw (2008), International Law,6th Edition, Cambridge University press, p 844

Pollution has been defined, however in OECD instruments[72] as "the introduction by man, directly or indirectly, of substances or energy into the environment resulting in deleterious effects of such a nature as to endanger human health, harm living resources and ecosystems, and interfere with amenities and other legitimate uses of the environment.

The major forms of pollution includes air pollution; the release of chemicals and particulates into the atmosphere like carbon monoxide, nitrogen oxides, chlorofluorocarbons and other pollutants produced industries or motor vehicles. light pollution, includes light trespass, over illumination and astronomical interference. Noise pollution, thermal pollution, Visual Pollution, Water pollution, soil contamination occurs when chemicals are released by spill or underground leakage like herbicides, pesticides and chlorinated hydrocarbons and radioactive contamination especially from nuclear activities, like nuclear power generation and nuclear power research, manufacture and consumption.[73]

2.9.2 Stockholm Conference of 1972

Stockholm conference of 1972 was the first largest United Nations conference on the Human Environmental which met at Stockholm from June 5 to June 16, 1972. Pursuant to the United Nations General Assembly's resolution of December 3, 1968 represented the first major improvement of the human environmental by international agreement on as universal level as possible.[74] Therefore Stockholm conference is considered as an early milestone for international environmental law because at this high profile gathering the number of texts best known of which are the Stockholm declaration of

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72 OECD, (1974) Recommendation of the Council on Principles concerning Transfrontier Pollution, C (74)224, OECD.

73 Tanzania Environment Management Act, No. 20 of 2004, defines pollution to mean any direct or indirect alteration of the physical, thermal, chemical, biological, or radio-active properties of any part of the environment by discharging, emitting, or depositing of wastes so as to adversely affect any beneficial use, to cause a condition which is hazardous to public health, safety or welfare, or to animals, birds, wildlife, fish or aquatic life, or to plants or to cause contravention of any condition, limitation, or restriction which is the subject to a licence under the said act.

74 JG starke , Introduction to international law, 18th Edition Butterworth and Co. (Publishers) Ltd 1997 at p 427

principle for the preservation and enhancement of the human environmental and the ambitious Action Plan for the Human Environment which contains 109 recommendations. The Stockholm declaration, which consists of a preamble and 26 principles contain provision not only addressed to the traditional subjects of international law but also deals with environmental rights and duties of individuals, organizations, local and national government and international institutions. It has been said of the conference. That "In environmentally conscious circles the calendar starts in 1972, the year of Stockholm Conference."[75] These show that the Stockholm conference is the first global conference which creates consciousness to the world about environmental protection.

2.9.3 Enforcement of environmental laws

A State implements an international norm at the domestic level in three phases: first, by adopting national legal measures; second, by enforcing them; and third, by reporting on the implementation measures. National legal measures might include enacting legislation, formulating policies or administering resources. The domestic implementation measures adopted need to be appropriate for the purpose of meeting obligations under the international treaty, so as to achieve 'compliance' with treaty obligations. The mere fact that an implementation measure is taken does not mean that it is adequate to meet a treaty obligation nor that the State is necessarily compliant with its obligation[76].

The term 'compliance' is part of a range of terminology used to describe patterns of conformity with legal norms[77]. Compliance is defined here as 'the fulfillment by the contracting Parties of their obligations under a multilateral environmental agreement and any amendments to the multilateral environmental agreement. However, it should be observed that compliance is not an 'all or Gaps in the implementation of

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75 Supra note 1 P 5

76 Gregory L Rose, Gaps in The Implementation of Environmental Law at The National, Regional and Global Level (at First Preparatory Meeting of The World Congress on Justice, Governance and Law for Environmental Sustainability at Kuala Lumpur, Malaysia 12-13 October 2011 p 8

77 Ibid at p 8

environmental law nothing' game. The fact that a Party is not fully compliant does not mean that it is fully non-compliant[78]. Despite the binary nature of the language used, compliance occurs across a scale of shades of grey. Enforcement is 'the range of procedures and actions employed by a State, its competent authorities and agencies to ensure that organizations or persons, potentially failing to comply with environmental laws or regulations implementing multilateral environmental agreements, can be brought or returned into compliance and/or punished through civil administrative or criminal action'[79]. Environmental treaties often articulate specific obligations that are negotiated without a clear plan for their national implementation, due to the difficulty of making concrete assessments of the financial, human, technical and social requirements of implementation.

Therefore, the anticipated requirements for national implementation by a particular country might be only loosely approximated at the time of negotiation. Some agreements may even seem to be inspirational or educative, lacking in specific ways of forming concrete assessments of the requirements for their practical implement ability. Novel approaches to promoting public participation in implementation include the defining of citizen rights to enforce legislation, particularly where public agencies otherwise lack accountability. Access to justice has been largely facilitated by providing wider standing for aggrieved parties to seek redress and the expansion of substantive and procedural opportunities for public interest inputs. The judiciary has, in recent years, enhanced enforcement efforts by governments to implement environmental laws. It plays a crucial role by interpreting legislation relating to environmental issues, integrating emerging principles of law within the holistic paradigms of sustainable development, providing a coherent and comprehensive strategy for integrating diverse sectoral laws into a cross-sectoral approach and for ensuring effective implementation of legislation. This extensive scope of influence has been extended in recent years, as the judiciary articulates fundamental rights to a satisfactory environment. Some

[78] Ibid at p 9
[79] Ibid at p 9

supreme courts have broadly interpreted elements contained in their constitutions to entrench the rights of the public to a healthy and protected environment. In some states, courts have given consideration to the concept of inter-generational and intra-generational equity and have applied the public trust doctrine in regard to the management of natural resources and the environment. The responsibility and liability of the industry has also been emphasized by the judicial support for the polluter pays principle. Further, the public's accesses to information in regard to the functioning of the Government, founded on the right to know and of free speech, and the public's access to the courts for the purpose of environmental litigation, have been considerably enhanced. Some jurisdictions have established specialist courts and tribunals to hear environmental matters[80].

2.9.4 The concept of best practice in environmental management in mining

Best practice can simply be explained as "the best way of doing things". Best practice environmental management in mining demands a continuing, integrated process through all phases of a resource project from the initial exploration to construction, operation and closure. That is to say for the so called best practice in environmental management in mining to be successful it requires careful planning and commitment from all levels and groups within a mining company. It is based on a comprehensive and integrated approach to recognizing, and avoiding or minimizing, environmental impacts. In order to be fully effective, this approach must be based on a sound set of generic and mining specific principles[81].

Best practice environmental management encompasses every aspect of planning for and operating a mine. For example, the practice of placing the environmental superintendent within the Engineering Department may have the effect of subsuming the powers and responsibilities of environmental staff to the Engineering Manager who will have conflicting priorities on many issues. This may also limit their scope to only those

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[80] Ibid at p 9

[81] http://www.ea.gov.au/industry/sustainable/mining/ accessed on March 21st 2013

issues traditionally addressed by the engineering department. It is now common practice for the senior environmental officer to be placed in a separate Environmental Department and report directly to the General Mine Manager .The potential scope of environmental issues to be considered, and consequently which fall under the umbrella of best practice environmental management, is reflected in the Fundamental Principles for the Mining Sector derived from the "Berlin Guidelines"[82] which were first devised in 1991 and revised in 1999 at the International Round Table on Mining and the Environment in Berlin. The first version of these principles concentrated mainly on the technical and physical aspects of environmental management, while the revision reflects the greater understanding of and concerns for social, community and gender issues which have developed internationally over the last decade.

The principles within best practice, listed above, and the fundamental principles for the mining sector derived from the Berlin Guidelines, demonstrate that best practice depends on a mix of high quality regulation, administrative control and mine management. It is not acceptable for a mining operator to simply conform to regulatory standards without ensuring that those standards will provide adequate protection of the environmental values at the actual mine site. Governments must also share the responsibility of ensuring that their standards, regulations, and staff skills are appropriate to provide reliable assurances to the community that they and their environment are not being exposed to levels of risk they regard as unacceptable.

2.9.5 Conclusion

This chapter has clearly defined different concepts relating to the topic. It has clearly explained the following concepts; mining, environment, environmental impact of mining, environmental laws, international environmental laws, sustainable development, Agenda 21, pollution and the best practice concept in environmental management in mining. These concepts are relevant and much helpfully in understanding the subject of the research in the subsequent chapters.

[82] 1991 Berlin Guidelines for the mining industry

CHAPTER THREE
THE INTERNATIONAL LEGAL REGIME ON ENVIRONMENTAL PROTECTION IN MINING AREAS

3.0 Introduction

This chapter is made part in the research for critical analysis of the international environmental laws, which touched various international environmental treaties, conventions, declarations, principles and cases on environmental protection. The analysis of the laws based on implementation and enforcement of the laws in protection of the environment of mining areas.

3.1 International Environmental Laws and the Protection of Mining Areas

As remarked in the foregone paragraphs, this part is based on the environmental laws at universal perspective on the protection of mining areas in Tanzania which representing developing countries. Tanzania is the signatories of various international environmental treaties. This part included also some discussion on international mining laws in its generality.

International environmental laws often advocate the use of specified techniques and procedures to achieve the aims of the agreement.[83] In Tanzania international treaties are not self-executing they must be incorporated in a national legislation in order to have a force of law. The practice in Tanzania has been that a treaty is signed subject to ratification either by tabling it before the cabinet or by resolution adopted by the parliament. This practice has been provided under Article 63(3) (e) of the Constitution of the United Republic of Tanzania of the 1977 as amended time to time. This is usually

[83] UNCLOS, Art. 62, allows that the laws and regulations of a state party concerning fishing in the EEZ "may relate" to licensing of fishermen and fishing vessels, payment of fees, setting fishing quotas and seasons, and similar measures.

followed by enacting the legislation, entitled implementation Act or by incorporating the international treaty without using the earlier title.[84]

Tanzania is a party to various international environmental treaties which has universal application and those limited to African region. The researcher has discussed the treaties, convention and declarations which has direct concern to the subject of the research.

3.2 International mining laws and Environment

While there is no comprehensive international law of mining,[85] still a number of treaties or conventions[86] have provisions regulating the industry. However, Laws regulating mining are increasing in scope and stringency, based on the new international paradigm of "sustainable development" - development that meets the needs of the present without compromising the ability of future generations to meet their own needs[87]. For mining, this means focusing not only on traditional economic concerns, but also on new social, economic, and environmental concerns, particularly in developing nations with resource-based economies. International environmental law is becoming a significant part of this changing regulatory framework, eroding state sovereignty over resources with new treaties, judicial decisions, and the codes and practices of governmental and industry organizations.

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[84] In *East Africa Community v. R* [1970] E.A 457, it was held that the provision of the treaty entered into by government…do not become part of municipal law…save in so far as they made by such laws of the country. However lack of its incorporation does not render the treaty signed to be of completely no effect to Tanzania, refer also the case of *Transport Equipment Ltd and Reginald John Nolam v. devran p. Vallambia*. Civil App. No 19 of 1993

[85] Eggert, Roderick G, *Mining and the Environment: An Introduction and Overview*, mining and the environment: international perspectives on public policy 1 (roderick g Eggert ed. 1994).p 4-11

[86] The different designations - "treaty", "convention", "agreement", "protocol", etc. - all mean essentially the same thing and have no special significance for our purposes here *(Vienna Convention on the Law of Treaties, Article 2(1)(a)*).

[87] Brundtland Commission definition of sustainable develpment

3.3 Stockholm Declaration

"States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction do not cause damage to the environment of other States."[88] As earlier remarked in the foregone chapters, traditionally, international law has taken a "hand-off" approach to mining activities. It is a general principle of international law that states have sovereignty that is, supreme, independent political and legal control over their own natural resources just as they do over persons, companies and other entities within their borders. This is stated clearly in principles 21 of the Stockholm conference quoted hereinabove. However, States may give up portions of their sovereign powers through long-term practice of legal customs, through the development of general principles of a legal nature, through treaties and other binding legal agreements, and through judicial decisions[89]. These new rules - by which a State surrenders some of its right to do what it pleases and becomes bound to new conduct standards along with other states make up what we call "international law".[90]Therefore, The UN through the declaration titled "the United Nations conference on the Human Environment" with its well stated 26 principles show contribution of the UN in matters concern environment protection. Specifically, principle 21[91] is much relevant in the study in question. The principle show right and responsibility of the state to exploit its natural resources such as minerals pursuant to their own environmental policies with only responsibility to ensure that activities of exploit its resources do not harm the environment of other

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[88] Principle 21 of the Stockholm Declaration of the United Nations Conference on the Human Environment, in *Report of the United Nations Conference on the Human Environment* (Stockholm, Sweden, June 5-16, 1972), United Nations Doc. A/CONF. 48/14/Rev. 1 at 3 (1973), 11 ILM 1416 (1972)

[89] Buergenthal, Thomas & Harold G. Maier, Public International law in a Nutshell (2d ed. 1990). P 15

[90] Ibid p 15

[91] Principle 21 of the 1972 Stockholm Conference as it reads "States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction".

states. This principle is vital in the study as it show how UN participate in protection of the environment and to what extent, the principle cited show UN concern in the protection of the environment of other states not the state which exploit its resources. This show weakness of the UN as it should also make concern to the environment of the state which exploits its resources.

3.4 The Rio Declaration

Precisely 20 years afterward, in 1992, the United Nations summoned the second "Earth Summit," the United Nations Conference on Environment and Development, in Rio de Janiero in Brazil. Prior to UNCED, the United Nations appointed World Commission on Environment and Development titled Brundtland Commission which had developed its seminal work on "sustainable development". The United Nations General Assembly strongly endorsed the concept and made it the operative theme for UNCED. The Assembly set out an ambitious agenda for Rio, calling for the following agenda: 1.an "Earth Charter" that would supersede the Stockholm Declaration and have the status of international constitutional law, 2. an action plan for the 21st-century accomplishment of these goals, to be called "Agenda 21," and the ceremonial signing of three treaties on 3.biodiversity, 4.climate change, and 5.forestry. The 172 nations attending made it the greatest international summit on any subject in history. But Rio fell short of those high expectations. Instead of a constitutional Earth Charter, the delegates could only agree on a non-binding Declaration. Some of principles are less protective than their Stockholm Declaration counterparts[92]. A very ambitious Agenda 21 was adopted by consensus, but there was no agreement on how nations would fund its estimated US$500 billion each year cost. Framework treaties on biodiversity and climate change were signed, but left all substantive regulations to be developed later. Instead of a forestry treaty, UNCED parties could agree only on a "Non-legally Binding Authoritative Statement of Principles". Still, the delegates did adopt by consensus the 1992 Rio Declaration on Environment and Development, consisting of 27 revised environmental principles, and

[92] Guruswamy, Lakshman & Brent Hendricks, International Environmental Law In A Nutshell (1997) P 13

Agenda 21, a detailed 600-page action plan for implementing those principles. Together, the 31 two documents have much to say about global mining operations, as nearly half the Declaration's principles have relevance to minerals development.

The Rio Declaration has been criticized for appearing to place a higher priority on development than on environmental protection. This tone is set early by Rio Principle 1, which abandons the nascent Stockholm "right" to environment in favor of recognizing, for the first time, a "right to development"[93]. Rio Principle 2[94] repeats Stockholm Principle 21 - affirming state sovereignty over resources and the prohibition against trans-boundary harms but weakens it by adding that States may "exploit their own natural resources pursuant to their own environmental and developmental policies". The "right to development" is balanced by at least a dozen sustainable development provisions, including adoption of "sustainable development" as the guiding paradigm for the future[95], limiting the development right "so as to equitably meet developmental and environmental needs of present and future generations" as per Rio principle 3, and requiring environmental protection to be "an integral part" of development activities stated in Rio Principle 4. Development is further limited by some bold new principles, not found in Stockholm. Rio Principle 15 sets forth the important "preventive" or "precautionary approach", which states that, "Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation". Thus, for example, mineral developments cannot insist on access or unconditioned permits simply because critics have not proved the validity of their concerns over serious or irreversible impacts.

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93 Principle 3 of the Rio Declaration on Environment and Development 1992

94 Principle 2 of the Rio Declaration of 1992 '' States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction".

95 Ibid principles 4 and 8

This is the "internalization" principle long advocated by economists as a means of reversing our current tendency to treat pollution as an externality. Also of great significance to resource-based economies dealing with mineral development is Rio Principle 10, which calls for increased public participation in environmental issues: citizen access to environmental information from their Governments, opportunity to participate in environmental decision-making, and effective access to courts and agencies for redress and remedies. Principles 11 and 13 call on States to enact "effective environmental legislation" and laws of "liability and compensation" for victims of environmental damage. "Indigenous people" and "local communities" are positively singled out. States should support their "identity, culture and interests" and enable their effective participation in sustainable development[96] . Principle 17 makes Environment Impact Assesment generally accepted procedure for all activities likely to have a significant adverse environmental impact. And Principles 18 and 19 restate the longstanding international environmental laws of "timely notification" and "good faith consultation" for environmental emergencies and transboundary impacts. 32 Developing nations were accorded special treatment in Rio, as they were in Stockholm, with priority to be given their special situation and needs, with acknowledgement of the "common and differentiated responsibilities" among States.[97] Hence placing greater responsibility on developed nations because of their greater financial and technical resources, greater consumption and pollution, and with recognition that developed-countries standards may be economically and socially unwarranted for developing countries.[98] While not outright rejecting trade sanctions as an environmental enforcement tool (as used in the Basel Convention, the Convention on International Trade in Endangered Species of Wild Fauna and Flora and the ozone treaty, Rio Principle 12 casts a shadow on their use by requiring that enforcement action not constitute "arbitrary or unjustified discrimination" or a "disguised restriction" on trade. Principle 12 similarly disapproves "unilateral actions" to protect the environment

[96] Ibid principle 22
[97] Ibid principle 7
[98] Ibid principle 11

outside one's jurisdiction, thus criticizing States' extraterritorial applications of their laws for example, actions by the United States to protect dolphins from the Mexican tuna fleet or to hold its mining companies to United States standards in other countries.

3.5 "Rio+20"

This is the short name for the United Nations Conference on sustainable Development which took place in Rio de Janeiro, Brazil in June 2012 the year counted twenty years after the landmark 1992 Earth Summit in Rio. At the Rio+20 conference world leaders, along with thousands of the participants from both private sector, NGOs and other interested groups, came together to shape how to reduce poverty, advance social equity and ensure environmental protection. The Rio+20 is one of the essential conferences in the 21st century as it has affirmed fundamental principles and previous commitments and more important it results the document entitled "The future we want" which was agreed by member states after negotiations. This document has a number of sections which cover essential issues in environment. Inter alia the document cover on mining sector in section 227[99] which the heart of the section show the participants including the heading of the states acknowledge the contribution of the mining sector in the world economy particularly in developing countries, their acknowledge also the sovereignty doctrine of the state in exploiting their natural resources pursuant to their priorities. Further the participants acknowledge that mining activities should maximize social and economies benefits as well as effectively address negative environmental and social impacts.

3.6 United Nations Conference on Environment and Development: Agenda 21

To implement the Rio Declaration, UNCED also produced an extremely detailed and ambitious action plan for accomplishing the Rio principles in the 21st century that is Agenda 21. Countries around the world are developing "national action plans," with the new United Nations Commission on Sustainable Development (UNCSD) and other international agencies promoting implementation. Overlooked by many, the

[99] Section 227 of the document entitled " The Future we want " p 51

development and implementation of these Agenda 21 action plans at the country level should stimulate considerable interest and involvement on the part of resource-based economies and others interested in mineral resources, given their potential to be the vehicle for greater planning requirements and restrictions on mineral resource development. Agenda 21 consists of 40 chapters grouped in four sections. Each chapter typically is divided into subchapters called Programme Areas, and each of these typically consists of a series of numbered paragraphs describing sequentially Basis for Action, Objectives, Activities, and Means of Implementation. After a preamble Chapter 1, Section 1 (Chapters 2-8) covers Social and Economic Dimensions, focusing successively on International Cooperation, Consumption, Poverty, Demographics, Human Health, Settlements, and Integrating Environment and Development in Decision-Making. Section 2 (Chapters 9-22) addresses the key area of Conservation and Management of Resources for Development, focusing on issues relevant to mining, such as Atmosphere ,Deforestation, Desertification, Mountain Development, Biodiversity, Oceans, Freshwaters, Toxic Chemicals, and Hazardous Wastes. Section 3 (Chapters 23-32) looks at Strengthening the Role of Major Groups, including Indigenous Communities, NGOs, Local Authorities, Workers, Business and Industry.

Finally, Section 4 (Chapters (33-40) addresses Means of Implementation, including Financial Resources (cost estimates for implementation), Technology Transfer, Education and Training, Capacity-Building in Developing Countries, International Legal Instruments, and similar topics. While there is no specific chapter in Agenda 21 dealing with the minerals sector (as there is for agriculture, for example), there are a host of provisions of direct and indirect relevance to mineral development; the mention of some of the key ones here will demonstrate the need for more extensive study. The Economic and Social Council and other United Nations agencies are urging that national plans address minerals issues in the context of Agenda 21, Chapter 10 (entitled "Integrated approach to the planning and management of land resources"). This should include: "the capacity of the environment to absorb the effects of resource use, the sustainability of the supply of essentially non-renewable resources, and the possibilities

for modifying production and consumption patterns through greater efficiency of use, new technologies, recycling and substitution". This Chapter 10 presents a programme for integrated planning and management of land resources. Its "broad objective is to facilitate allocation of land to the uses that provide the greatest sustainable benefits" (para. 10.5). Its specific objectives are "to review and develop policies to support the best possible use of the land and the sustainable management of land resources", "to improve and strengthen planning, management and evaluation systems", "to strengthen institutions and coordinating systems" and "to create mechanisms to facilitate the active involvement and participation of all concerned, particularly communities and people at the local level, in decision-making on land use and management" (para. 10.5(a)- (d)). For most countries, implementing even a portion of the suggestions in Chapter 10 would radically change the resource planning and allocation process. Other examples include Chapter 4 (Changing Consumption Patterns), which urges reduction in unsustainable demand for natural resources (para. 4.5), greater efficiency in the use of energy and resources (para. 4.18), minimizing generation of wastes (para. 4.19) and environmentally sound pricing (para. 4.24); Chapter 6 (Protecting and Promoting Human Health), which calls for extensive health protections in the industry and energy sectors (para. 6.41(j)); Chapter 13 (Mountain Development), suggesting alternatives to minerals development to prevent soil erosion, landslides, and loss of habitat and genetic diversity; Chapter 17 (Protection of Oceans), which address, among other things, degradation of the marine environment from oil and gas activities (paras. 17.18-.21); and Chapter 26 (Strengthening the Role of Indigenous Peoples), which calls for protecting indigenous people's lands "from activities which are environmentally unsound consider to be socially and culturally inappropriate" (para 26.3(a)(ii)). Without being exhaustive, general provisions of mining-sector interest can also be found in Chapter 19 on Toxic Chemicals, Chapter 20 on Hazardous Wastes, Chapter 30 on Strengthening the Role of Business and Industry, the technology transfer provisions of Chapter 33, and Chapter 39, which encourages additional international treaties and the development of international standards for environmental protection.

Agenda 21 also proposes two programmes relevant to the mining sector, one on interfirm cooperation with government support to transfer technologies to minimize waste and increase recycling, and a second on responsible entrepreneurship encouraging self-regulation, environmental research and development, worldwide corporate standards and partnerships in clean technology[100]. In summary, Agenda 21 proposes a stunningly diverse array of global, national and local reforms - some 2,500 projects in all - which if even a fraction were implemented could transform the way resource-based economies and the world deal with mineral development.[101] The Economic and Social Council notes: "Agenda 21...sets the priorities under which mineral resource management and technical assistance are to be carried out. Further general guidance for these priorities is given by the Capacity 21 programme of Agenda 21[102].

The goals of this programme are to (a) assist countries in incorporating the principles of sustainable development into their development plans and programmes, (b) assist countries in involving all stakeholders in developing planning and environmental management and (c) create a body of experience and expertise in sustainable development and capacity-building that will be of continued material value to, and influence the operation of, developing countries, UNDP, the specialized agencies, non-governmental organizations and other donors.

3.7 Nature preservation laws

In addition to national laws protecting parks, wilderness, wetlands, and nature generally[103], various international treaties have been developed since the 1940s to protect outstanding natural areas and resources. Because a "listing" under one of these

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[100] Warhurst, Alyson, *The Limitations of Environmental Regulation in Mining*, MINING AND THE ENVIRONMENT: INTERNATIONAL PERSPECTIVES ON PUBLIC POLICY 133 (Roderick G Eggert ed. 1994).p 168

[101] Ibid at p 169

[102] Ibid

[103] Pring, George W & Steve Miller, *Wilderness and Natural Area Preservation in the United States*, in PROCEEDINGS OF THE 1987 CONFERENCE ON ENVIRONMENTAL LAW, UNIVERSITY OF PEKING, BEIJING, CHINA (University of Colorado 1989).

international treaties can place areas "off limits" to development, they have been and will continue to be battlegrounds between mining interests and environmentalists[104].

3.8 1940 Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, the 1968 African Convention on the Conservation of Nature and Natural Resources, the 1979 Berne Convention (Europe) and subsequent EU Council Directives, and the 1985 ASEAN Agreement on the Conservation of Nature and Natural Resources.

These treaties are potentially very significant for the negotiation of sustainable development in mining, as they can be used to block or redirect mining access and development.[105] One example is the defeat of the Windy Craggy mine proposal by the listing of the Tatshenshini-Alsek Region, British Columbia, Canada, as a World Heritage Sit. The Coronation Hill mine in the Northern Territory of Australia was turned down primarily because of Aborigines' claims; significantly, Hemisphere however, concerns were also raised that, while the mine itself would not have negative environmental effects on downstream Kakadu National Park, the cumulative environmental impact if other mines were allowed in the area "would threaten...the World Heritage listing" of the Park[106]. Protection of sites under these nature treaties can provide significant leverage to resource-based economies, NGOs and others in dealing with future mining proposals.

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104 Wise, SJ Colin, *Environmental Considerations in International Mining Operations*, INTERNATIONAL RESOURCES LAW II: A BLUEPRINT FOR MINERAL DEVELOPMENT 14B-25 (Rocky Mountain Mineral Law Foundation ed. 1995).

105 Wise, SJ Colin, **Op cit** p 15

106 Cox, Anthony, *Land Access for Mineral Development in Australia*, MINING AND THE ENVIRONMENT: INTERNATIONAL PERSPECTIVES ON PUBLIC POLICY 21 (Roderick G Eggert ed. 1994) p 27

3.9 Biodiversity Treaty

This is one of the major events of the 1992 "Earth Summit" in Rio de Janeiro Brazil. The convention could have major implications for the mining industry in the future. Its core concept is that nations are "responsible for conserving their biological diversity and for using their biological resources in a sustainable manner". International law now has two dominant environmental treaties dealing with the preservation of biological diversity in ecosystems, species and gene pools - this one for earthly biodiversity and the Law of the Sea Convention.

While the Biodiversity Treaty has many important provisions affecting development in general including funding, technical assistance, and technology transfers it has preservation provisions that have the most immediate relevance to mining. It requires State parties to develop and implement national biodiversity plans, which are to include inventories, monitoring, planning, management, new laws, and the establishment of protected areas

3.9.1 UN Convention to Combat Desertification, 1994

As a direct consequence of the crisis due to drought in the African, the UN General Assembly convened a conference on desertification in 1977, which adopted a Plan of Action to Combat Desertification calling for national and regional efforts through an integrated program of land management assessment, implementation of corrective measures, and strengthening of scientific and technological infrastructures in dry land nations.[107] Effective progress was made, however, only in the aftermath of the 1992 Rio de Janeiro Conference. An international negotiating committee was established[108] and on June 17, 1994 the UN Convention to Combat Desertification in those countries experiencing serious desertification, particularly in Africa, was adopted.[109]

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[107] Report on the UN Conference on Desertification, UN Doc. A/CONF.74/36 (1977). See also Kyle W. Danish, International Environmental Law and the "Bottom-up" Approach: a Review of the Desertification Convention, 3 INDIANA J. of GLOBAL LEGAL STUDIES 133, 141 (1995).

[108] On the history of the negotiating process, see Burns supra note 11 at 11.

[109] Weston V.G.4; entry into force Dec. 26, 1996

The Convention defines desertification as land degradation in arid, semi-arid, and dry sub humid areas resulting from various factors, including climatic variations and human activities.[110] This research is relevant in the study as mining is among human activity which needed to be done in sustainable way. The Convention advocates effective action in the form of action programs.[111] This involves long-term integrated strategies that focus simultaneously, in affected areas, on improved productivity of land and the rehabilitation, conservation and sustainable management of land and water resources.[112] Accordingly, the Parties shall adopt an integrated approach addressing the physical, biological and socio-economic aspects of the processes of desertification and drought.[113]

3.9.2 The 1989 ILO adopted a Convention Concerning Indigenous and Tribal Peoples in Independent Countries (No. 169)

This is the most detailed and protective international authority to date. The Convention so definitely promotes the principle of self-determination that it may well violate principles of sustainable development and environmental protection. This convention is useful in the study as it shows how international convention contradicts each other in the question of environmental protection, though not all convention but some of them. The Economic and Social Council has also been active on indigenous protection issues and mining. It has created a Working Group on Indigenous Populations. In 1993 it produced a Draft Declaration on the Rights of Indigenous Peoples, with many provisions affecting natural resources development. The Commission on Human Rights has taken up the draft and is further elaborating it for ultimate presentation to the General Assembly for adoption. Indigenous/tribal peoples and local native communities have increasingly broadly recognized rights to protect their concerns and to participate in the decision-making on implementation of mineral resources development projects. A company or Government that neglects to involve these interests faces the prospect of

[110] Art.1 (a) of the UN Convention to Combat Desertification, 1994
[111] Ibid Arts. 9-11
[112] Ibid Art. 2(2) and Art.10
[113] Ibid Art.4(2) (a) and Art. 10(4)

project opposition, mine site protests and violence, reputation damage and potentially successful court attacks, like Ok Tedi and Texaco. On the other hand, for companies and Governments that includes indigenous and local community interests early and fairly in the negotiation of mining agreements, "the benefits will outweigh the costs"[114].

3.9.3 Berlin Guidelines to mining industry

In 1991, the United Nations convened an important roundtable of international mining experts in Berlin to address environmentally sustainable mineral development[115]. From that emerged the Berlin Guidelines[116], which set out important mining environment principles both for the industry and for the cooperating multilateral and bilateral financing institutions[117]. The Berlin Guidelines proclaim that "*sustainable mining activities require good environmental stewardship in all activities, from exploration and processing to decommissioning and reclamation*"[118].To achieve this, Governments, companies and the mining industry "should as a much as possible make environmental management a high priority: "notably during the licensing process and through the development and implementation of environmental management systems which include early and comprehensive environmental impact assessments, pollution control and other preventive and mitigative measures, monitoring and auditing activities, and emergency response procedures"[119]. In addition, the Berlin Guidelines call for environmental accountability[120], participation of affected communities[121], best practices even "in the

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114 White, Heather G, Including Local Communities in the Negotiation of Mining Agreements: The Ok Tedi Example, 8 TRANSNATIONAL LAWYER 305 (1995).P 350

115 *Berlin Guidelines*, in MINING JOURNAL at 2 (Sept. 20, 1991), also reprinted in 10 JOURNAL OF ENERGY & NATURAL RESOURCES LAW 355-357 (1992).

116 The International Round-Table on Mining and the Environment was held in Berlin, Germany, in June 1991. The guidelines for mining and the environment were drafted there. They contain a set of recommended actions by the various stakeholders in mining and the environment. The first edition of Environmental Guidelines for Mining Operations was produced as a result of the Round-Table. Thus the "Berlin Guidelines" help to set the scene and context for the present guidelines.

117 Nanda, Ved P, *International Environmental Law and International Business Ventures*, INTERNATIONAL ENVIRONMENTAL LAW: FOR NATURAL RESOURCES PRACTITIONERS 4-19 (Rocky Mountain Mineral Law Foundation ed. 1997).

118 2nd para of the Berlin Guidelines

119 Ibid para 1

120 Ibid para 2

121 Ibid para 4

absence of specific environmental regulations"[122], environmentally-sound technology[123], technology transfer, additional environmental funding at existing operations[124], risk analysis and management[125], reduced trade and investment barriers[126] and transparent environmental regulation [127]. Significantly, the document also produces guidelines for multilateral and bilateral DAAs, urging financial institutions to similar high and detailed standards of sustainable development protection. For quick reference the below are the fundamental guidelines principles for the mining sector taken from the Berlin Guidelines:

i. Recognize environmental management as a high priority, notably during the licensing process and through the development and implementation of environmental management systems. These should include early and comprehensive environmental impact assessments, pollution control and other preventative and mitigation measures, monitoring and auditing activities, and emergency response procedures.
ii. Establish environmental accountability in industry and government at the highest management and policy-making levels.
iii. Encourage employed at all levels to recognize their responsibility for environmental management and ensure that adequate resources, staff, and requisite training is available to implement environmental plans.
iv. Ensure the participation and dialogue with the affected community and other directly interested parties on the environmental aspects of all phases of mining activities.
v. Adopt best practices to minimize environmental degradation, notably in the absence of specific environmental regulations.

[122] Ibid para 5
[123] Ibid para 6
[124] Ibid para 7
[125] Ibid para 8
[126] Ibid para 10
[127] Ibid para 14

vi. Adopt environmentally sound technologies in all phases of mining activities and increase the emphasis on the transfer of appropriate technologies which mitigate environmental impacts including those from small-scale mining operations.

vii. Seek to provide additional funds and innovative financial arrangements to improve environmental performance of existing mining operations.

viii. Adopt risk analysis and risk management in the development of regulation and in the design, operation, and decommissioning of mining activities, including the handling and disposal of hazardous mining and other wastes.

ix. Reinforce the infrastructure, information systems service, training and skills in environmental management in relation to mining activities.

x. Avoid the use of such environmental regulations that act as unnecessary barriers to trade and investment.

xi. Recognize the linkages between ecology, socio-cultural conditions and human health and safety, both within the workplace and the natural environment.

xii. Evaluate and adopt, wherever appropriate, economic and administrative instruments such as tax incentive policies to encourage the reduction of pollutant emissions and the introduction of innovative technology.

xiii. Explore the feasibility of reciprocal agreements to reduce trans-boundary pollution.

xiv. Encourage long term mining investment by having clear environmental standards with stable and predictable environmental criteria and procedures

3.9.4 Soft law-making by the United Nations and its established agencies

Adding together to UNCED, an arrangement of other United Nations bodies and conferences make international soft law known with different names such as "declarations", "resolutions", "draft rules", "guidelines", "principles", and the resembling which they hope will shape or become accepted as international law. Many

of these initially non-binding authorities can have present or future impact on the mining sector[128].

The United Nations, with its 185 member States and its many organs, agencies and conferences, produces numerous soft-law pronouncements which can evolve into international hard law[129] The Organization's six "principal organs" are the General Assembly, Security Council, Economic and Social Council, Trusteeship Council, the International Court of Justice (ICJ, commonly called World Court) and the Secretariat. There are 14 United Nations "specialized agencies" (actually autonomous IGOs having an affiliation with the United Nations), relevant ones in the mining/sustainable development arena including the World Bank Group, International Monetary Fund (IMF), UNESCO, International Labour Organization (ILO), United Nations Industrial Development Organization (UNIDO), International Maritime Organization (IMO) and WHO[130]. The General Assembly has also created a number of "subsidiary agencies" (non-autonomous) to carry out its functions, relevant ones including UNEP, UNDP, United Nations Conference on Trade and Development (UNCTAD), UNRFNRE (within UNDP) , and GEF. Within the United Nations Secretariat in New York, the Department of Economic and Social Affairs has succeeded the Department of Development Support and Management Services as the principal office involved in technical cooperation in the field of minerals; it engages in environmental impact analysis of mining, training of national staff and enhancement of institutional and human resource capacity for environmental management of minerals development, promoting conservation, recycling, and reclamation, and development of mining legislation incorporating environmental and safety regulations[131] The Assembly and other United Nations agencies and conferences do not have general law-making

[128] George W. (Rock) Pring , Mining, Environment and Development (a series of papers prepared for the United Nations Conference on Trade and Development (UNCTAD) Published by UNCTAD
[129] website: **http://www.un.org**
[130] http://www.un.org/en/globalissues/environment accessed on 4th February 2013
[131] (ECOSOC/Activities para 6).

authority[132]. However, they can articulate principles and rules which have potential to harden into treaty or customary law. In addition to UNCED, for example, the 1982 World Charter for Nature (adopted overwhelmingly by the Assembly with only the United States voting against it) contains 24 statements on the need to protect nature, genetic viability, necessary habitats, unique areas, habitats of rare or endangered species, use of best available technologies, making conservation of nature an integral part of development activities. Its provisions are beginning to find their way into binding international law like UNCLOS, the Biodiversity Treaty, and others treaties. Even United Nations conferences on topics seemingly unrelated to mining or the environment bear watching. Something as apparently distant as the Programme of Action adopted at the 1994 International Conference on Population and Development contains statements on reducing and eliminating unsustainable patterns of production and consumption which only add more weight to the development of an international hard-law consensus on issues affecting mining.

3.9.5 United Nations Environmental Programme [UNEP]

UNEP was created by the Assembly in 1972 to be "the environmental conscience of the United Nations system" and coordinate development of sound environmental practices worldwide[133] . With a secretariat in Nairobi, Kenya (the first United Nations agency to be located in a developing nation), and an industry environment office in Paris, it is a major force in promoting and assessing sustainable development. One of UNEP's key contributions is in drafting treaties and soft-law guidelines for international environmental law. A substantial number of the hard-law conventions previously discussed were drafted and negotiated by UNEP, including the Biodiversity, Ozone, Basel, and Climate Change, treaties, as well as the very successful Regional Seas Treaty Programme. UNEP also helps develop non-binding "guidelines" on environmental

[132] BUERGENTHAL, THOMAS & HAROLD G. MAIER, PUBLIC INTERNATIONAL LAW IN A NUTSHELL (2d ed. 1990). P 42

[133] Haas, Peter M, *United Nations Environment Programme: Agency Overview of the UNEP*, ENVIRONMENT, Sept. 1994, at P 43, see also **http://www.unep.org** accessed on 2nd February 2013

protection which command substantial respect as soft law. Examples of these include the World Charter for Nature, UNEP's 1978 Draft Principles on Shared Natural Resources (which call for equitable sharing and avoidance of adverse environmental effects), its 1991 Principles and Guidelines for Environmental Management and Sustainable Development in Technical Assistance, its Guidance Document on Transboundary Movements of Hazardous Wastes Destined for Recovery Operations, and its guidelines on Offshore Mining and Drilling (1982), Banned and Severely Restricted Chemicals (1984), Marine Pollution from Land-Based Sources (1985), Hazardous Wastes (1987), Environmental Impact Assessment (1987), and Exchange of Information About Chemicals in International Trade (1987). UNEP's Industry and Environment Centre in Paris has an ongoing programme of issuing industry specific environmental guidelines, including highly detailed ones for mining operations. UNEP has extensive programmes for training national officials in environmental assessment and management.

3.9.6 Conclusion

It is observed that international environmental laws as well as international mining laws does not put well attention on environmental protection rather than creating smoothly path to an environmental unfriendly activities to natural beauty world’s environment, also the environmental laws drafters creates some provisions without including enabling provisions to put into force the laws this cause or allow much environmental negative impact in mining areas which affect the large mass and turn the world to be calamity to living organisms including human being.

CHAPTER FOUR
TANZANIA ENVIRONMENTAL PROTECTION AND MANAGERIAL STRUCTURE IN MINING AREAS

4.0 Introduction

This chapter is explaining the environmental managerial structure and scheme of laws in environment protection in Tanzania. The chapter contributes towards clear understanding of the whole organizational structure of the environmental management in Tanzania. It necessary part in the research at hand as it makes connection on the environmental management as set out in the Environmental Management Act, no 4 of 2004 .The EMA is the principal environmental legislation in mainland Tanzania. There fore this chapter gives direction on where to go or which authority is responsible concern to a certain environmental issue or responsibility.

4.1 Tanzania Mining Laws

Mining is increasing become the leading sector in Tanzania in terms of exports. During the last ten years Tanzania has witnessed high growth in mining sector. Reputable mining companies such as Barrick Gold, Ashanti Anglo-Gold, Placer Dome and Resolute are operating large-scale mines in Tanzania. The main legislation under which mining activities are regulated in Tanzania is the Mining Act, 2010. Other relevant statutes include Income Tax Act, 2004; Environment Management Act, No 20 of 2004 and Tanzania Investment Act, 1997. There are detailed regulations made under the Mining Act such as Mining (Environmental Management and Protection), 1999; and Mining (Safe Working and Occupational Health), 1999; and Mining (Dispute Resolutions) Rules, 1999.

4.2 Tanzania environmental laws and the protection of mining areas

The management of the activities that affect environment in Tanzania has been undertaken on the basis of a superfluity of laws, regulations and policy. Almost the whole corpus of environmental law is statutory based. Few cases have been decided on the basis of these laws. Conversely, the common law of torts on nuisance and

negligence are applicable in Tanzania. Thus, since these laws are widely scattered, their enforcement in the whole management of the environment has often led to conflicts between different departments of government, thus undermining their effectiveness.

Legislation aimed at regulating the use and management of natural resources has evolved along sectoral lines, governing specific environmental media. The country's major sources of law include: the common law, principles of equity, and statutes of general application, Islamic law in some instances, customary law, international conventions to which Tanzania is a party, constitutional law, principal, subsidiary, and case law (precedent). However, the main sources of environmental law are the common law[134] and the statutory law in the form of principal legislation.[135]Subsidiary legislation and international law and the Constitution of the country that is The Constitution of the United Republic of Tanzania of 1977 as amended. The main legislation in the protection of the environment including mining areas is Environmental Management Act, 2004. For minerals sector, there are additional regulations, namely, Mining (Environmental Management and Protection) Regulations, 1999 issued under the Mining Act, Cap. 123 of the revised laws 2002. Section 232 of the Act provides that where any provision in

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134 'Common law' refers to binding rules and principles of laws developed by the courts over time, as opposed to laws enacted by Parliament. The common law rules that are applicable in Tanzania are those developed by the Tanzanian courts, both colonial and post-colonial, as well as those that were in force in England on 22 July 1920. The most important common law principles that are relevant to environment are the torts of negligence, nuisance and the rule in Rylands v Fletcher (1868) L.R.3 H.L 330. These torts are covered by any standard book on the law of tort. Environmental torts have been defined more extensively in the common law of other countries.
However, where these rules have evolved in Commonwealth countries, they may be argued to apply in Tanzania, as 'persuasive authority' to the courts. For example, the courts of India and Australia have extensively defined common law environmental torts. Therefore, even where no specific precedent exists in the Tanzanian context (and some already do), it is fair to say that these developed environmental common law rules may very well bind individuals and businesses in the future. (This is by the virtue of the Judicature and Application of Laws Ordinance, Cap. 453).

135 All laws enacted by the Parliament in Tanzania are known as principal legislation. The NEAP and the NCSSD note that there are over 50 principal laws which relate to environmental issues. Many of the laws are outmoded, most are not understood or currently enforced and overlap in terms of functional authority. Further, most of the existing laws are penal in nature. However, these laws fail to induce compliance because the *ex ante* value of the penalties prescribed is far below the cost of compliance. The NCSSD notes that there is a need to develop and implement new, integrated, enforceable and effective laws that are based upon sound social, ecological, economic and scientific principles.,

the Act is in conflict or otherwise inconsistent with the provisions of any other law, the provision of the Act has to prevail. This legislation establishes National Environmental Management Council which is national environmental protection agency responsible for administration of the Act and other environmental laws. It also provides for legal and institutional framework for impact and risk assessments, prevention and control of pollution, waste management, environmental quality standards, public participation, compliance and enforcement, and implementation of international instruments on environment. This legislation also lays down the procedure for conducting Environmental Impact Assessment ('EIA').The steps for conducting EIA are described for under the Environmental Impact Assessment and Audit Regulations, 2005. These Regulations were made under the Act. EIA is required for all projects that are likely to have significant adverse environmental impacts. The EIA is generally required with a view to determining the scale, extent and significance of the impacts and to identify appropriate mitigation measures. The projects which require mandatory EIA include extractive industries which include mining industry.

4.3 The Constitution of the United Republic of Tanzania, 1977 as amended time to time

The Constitution is the elementary law of the territory; the basic law under which all powers are derived and controlled and all other laws of the country are mandatory required to conform to the constitution. The Bill of Rights chapter in the Constitution of the United Republic of Tanzania does not directly and adequately address environmental matters in either way. The bill of Rights does not directly spell out the environmental rights, which could prompt the development of environmental laws and other laws, which are relevant to the environment.

It should also note that the provisions of the constitution are important to provide the framework for the administration of environmental laws.[136] Some constitution in their bills of rights has incorporated the right to a clean environment or the right to satisfactory environment. The Constitution of Federal Republic of Germany for instance has provisions for protection of environment.[137] Moreover different legal systems and culture have recognised environmental right as part of the fundamental right.[138]

That, as earlier expressed in the foregone paragraph the right to clean and safe environment is not expressly provided for in the constitution of the United Republic of Tanzania. Nonetheless this lacuna does not hinder the courts in Tanzania from affirming them. The courts in Tanzania have interpreted Article 14 of the Bill of Rights[139] which stipulates that every person has a right to life and to the protection of life by society to include the right to live in a healthy environment.[140] This judicial interpretation is taken by necessary implication taken to include the right to clean environment which the constitution of the United Republic of Tanzania of 1977 before that had never said that.

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136 Pallangyo D, (2007), Environmental Law in Tanzania; How far have we gone, 3/1 Law, Environment and Development Journal p. 26, available at http://www.lead journal.org/content/07026.pdf , p 39

137 Article 20(a) of the Constitution of Federal Republic of Germany provide that, the state is aware of its responsibility for present and future generations shall protect the natural resources of life within the framework of the constitutional order through the legislature and accordance with the law and principles of justice, the executive and the judiciary

138 The 1998 Constitution of the Swiss Federation (Article 74 (2)) proclaims that: "The polluters shall pay for the costs of avoidance and removal" of "harm and nuisance" to "the natural environment". See also, Sarin M.L , the *Protection Of Human Environment In A Divided World And International Law*, Bello, G and Ajibola, P.B.A, Essays in Honour of judge Taslim Olawale Elias, Volume 1, Ddordrecht/boston/London, Martinus Njihoff, publishers, 1991 pp 197- 67. Kiss A.C , *The International Rotection of Environment*, in Mac Donald, R et al (eds), the structure and process of international law: essays in Legal Philosophy Doctrine and Theory, The Hague/London/Boston, nijhoff Publishers, 1983, p. 1069

139 Peter, C.M. and Bierwagen R.M '*Tanzania: Political and Constitutional Evolution and Analysis of the Constitution*', *in* F. Reyntjens ed., *Constitutiones Africae* 1, 20 Brussels: Bruylant, Vol. 4, 1992.

140 This is shown by two only cases dealing with the environment in Tanzania:

1) *Joseph D. Kessy and others v. The City of Dar es salaam*, high Court of Tanzania at Dare s salaam civil case no 299 of 1998
2) *Festo Balegele and 794 others v. Dar es Salaam city Council*, High Court of Tanzania at Dare s salaam, miscellaneous civil cause no. 90 of 1991

The High Court of Tanzania in a landmark case of **Festo Balegele v. Dar es Salaam City Council**[141] interpreted this article to mean that persons are entitled to a healthy environment, and held that the City's decision to locate the garbage dump near residential areas violated plaintiffs' constitutional rights to a healthy environment.[142]This case is considered among the landmark cases in Tanzania in the field of the environmental laws, as it interpreted article 14 in the Bill of Right to establish an important fundamental right that is the right to clean environment which without that, right to life may be endanger.

Also in the case of **Felex Joseph Mavika v. Dar es Salaam City Commission,**[143] the plaintiffs instituted a main case claiming remedies from the defendants. They also applied for an interim order to restrain the respondents from dumping solid and liquid wastes in the Vingunguti area in the city of Dar es Salaam, to prevent pollution of the environment as well as to stop the endangering the lives of the plaintiffs and their families and other residents, pending the determination of the main suit. This case is still pending in the High Court of Tanzania at Dar es Salaam Registry.

Although the Constitution of the United Republic of Tanzania has no express provisions on environmental rights it has provisions for protection of natural resources. This is stated in Article 27(1) of the Constitution of the United Republic of Tanzania which provides that every person is obliged to safe guard and protects the natural resources of the United Republic, state property and all property jointly owned by the people, as well as to respect another person's property.[144]

Moreover the protection of natural resources has been equipped in the constitution of the United Republic of Tanzania which call and require every person to safe guard both state and communal property and to ensure the prevention of the misuse of resources by

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141 Misc. Civil Case No. 90 of 1991, High Court of Tanzania, Dar es Salaam

142 Pallangyo, D. Note 68 at p.32

143 Civil Case No. 316 of 2002, High Court of Tanzania, Dar es Salaam.

144 Article 23(2) of the Constitution of Zanzibar which states that " kila mtu ana wajibu wa kulinda maliasili ya Zanzibar, mali ya nchi na mali yote inayomilikiwa kwa pamoja na wananchi na pia kuheshimu mali ya mtu mwingine"

combating all forms of misappropriation and wastage so as to run the economy of the nation attentively with the attitude of the people who are masters of their fate of their own nation.[145]

In addition, the Constitution requires the Government to ensure that national resources are harnessed, preserved, and applied toward the common gaol.[146] While this Article is part of the non-judicial 'fundamental objective and directive principles of the state policy' provisions of the Constitution,[147] it portrays the commitment of the Government to ensure sustainable development. These provisions on the protection of natural resources can be extended to cover the protection of environment because natural resources including minerals are part of environment. Under the Constitution of the United Republic of Tanzania, 1977, policies and laws respecting natural resource management, are established and implemented by the central government. Parliament has exercised its constitutional authority to make laws concerning resources and the environment, but, as discussed above, local governments have been delegated specific powers of implementation and enforcement of the laws that delegation differ depending on the particular resources and laws involved.

4.4 The Mining Act, Cap. 123 R.E 2002

This Act, repeals the Mining Act, 1979 and five other laws,[148] it is the first legislation covering the whole of United Republic of Tanzania to make the Environmental Impact assessment (EIA) a legal requirement.[149]Applicants of mining licences are required by law to submit along with their application on environmental plan, including the

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145 Article 27(2) of the Constitution of United Republic of Tanzania, 1977 .R.E 2005

146 Ibid Article 9

147 Mwalosi, R. and R Hughes, Introduction Course on Environmental Impact Assessment in Tanzania: Resource Handbook

148 The Mining (controlled areas) Ordinance, Cap 124, The Mining (Loans) Ordinance, Cap 125, The Gold Trading Ordinance, cap 129 and the Gemstone Industry(Development and protection) Act, 1967 act No 11 of 1967

149 Zanzibar made a legal requirement in 1997 through the Environmental Management for Sustainable Development Act, 1996. The whole Part V of the act which has 24 provisions provide for EIA. Section 38(1) stipulates that no person should undertake any activity which is likely to have a significant impact on the environment without EIA Certificate and Section 38(3) has made it a criminal offence

proposal for the prevention of pollution, treatment of wastes, protection and reclamation of land and water resources and for minimising the adverse effects on the environment from mining operations.

The minister responsible for mining is the most important figure in the administration of this law. The minister has the overall control of everything, the applications of prospective licence, the minister has the final say on whom he should grant the licence.[150] However renew of mining licences are also under the minister powers,[151] this law grants the minister considerable law-making powers to make regulations for avoidance pollution of air, surface and ground water and soils and regulations of all matters relating to protection of environment.[152] Section 10 of the Act allows the minister responsible for minerals to conclude minerals development agreement with a holder of a mineral right. The objectives of the minerals development agreements is to guarantee the fiscal stability of a long-term mining project, define the circumstances or manner in which the minister may exercise his discretion conferred on him by the legislation, lay down environmental requirements and to define the dispute settlement mechanism arising out or relating to the agreement.

4.5 National Environmental Policy

The National Environmental Policy (NEP), adopted in 1997, seeks to provide the framework for making the fundamental changes that are needed in order to incorporate environmental considerations into the mainstream of decision making.[153] The NEP seeks to provide guidance and planning strategies in determining how actions should be prioritized, and provides for the monitoring and regular review of policies, plans and programmes. It further provides for sectoral and cross-sectoral policy analysis, so that compatibility among sectors and interest groups can be achieved. The overall objectives of the NEP are, therefore, the following:

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[150] S. 28 and 29 of The Mining Act, Cap 123 R.E 2002

[151] Ibid S. 50

[152] Ibid S.110(2)(j)

[153] Government of the United Republic of Tanzania, 1997. "National Environmental Policy." Office of the Vice-President, Dar es Salaam

- To ensure the sustainability, security and equitable use of resources in meeting the basic needs of present and future generations without degrading the environment or risking health and safety.
- To prevent and control the degradation of land, water, vegetation, and air, which constitute our life support systems.
- To conserve and enhance our natural and man-made heritage, including the biological diversity of Tanzania's unique ecosystems.
- To improve the condition and productivity of degraded areas, as well as rural and urban settlements, in order that all Tanzanians may live in safe, healthy, productive and aesthetically pleasing surroundings.
- To raise public awareness and understanding of the essential links between the environment and development, to promote individual and community participation in environmental action, and
- To promote international cooperation on the environment agenda, and expand participation and contribution to relevant bilateral, sub-regional, regional, and global organizations and programmes, including the implementation of treaties.

4.6 Environmental Management Act, No. 20, 2004

The Environmental Management Act (EMA) was passed by the National Assembly in 2004,[154] and come into force in the year 2005. EMA is a mother law that governs environmental issues in Tanzania. The Act includes provisions for legal and institutional framework for sustainable management of environment[155] an outline principles for management,[156] impact and risk assessments,[157] prevention and control of

[154] The first draft of the Environmental Management Act, 2004 was released in November 2003 and was subject to consultation involving over 140 stakeholders from different sectors, districts and regions. Comments and suggestions from these workshops were used to produce a second draft of the Act which was considered by the Cabinet and was submitted in the National Assembly in 2004. The Act provides for detailed measures for the protection of ecological processes, the sustainable utilisation of ecosystem and environmental protection

[155] The Environmental Management Act, 2004, Part V.

[156] Ibid, Part II.

[157] Ibid, Part VI.

pollution,[158]waste management,[159] environmental quality standards,[160] public participation,[161] compliance and enforcement;[162] and the basis for implementation of international instruments on environment.[163]

The Environment Management Act No 20, 2004 repeals the National Environment Management Act, 1983 and provides for the continued existence of the National Environment Management Council;[164] provides for the establishment of the National Environmental Trust Fund to provide for other related matters.[165] EMA vest very wide powers to the minister which give the room for improper management of environment in Tanzania. S.13 of the EMA stipulate for the powers of the minister and it provides that; "The Minister shall be overall responsible for matters relating to environment and shall in that respect be responsible for articulation of policy guidelines necessary for the promotion, protection and sustainable management of environment in Tanzania"[166] The Act gave the minister mandate to issue regulations and rules on economic instruments and regulations preventing and controlling any specified activities that result in adverse effects on the environment.[167] Construing the wording of this section 'may' give the Minister authority to make or not to make regulations and rules for proper sustainable development. The argument here is that the executive has been given wide powers to make and enforce the laws which affect the public at large. These powers are subject to manipulation and provide a room for corrupt activities.[168] Therefore there is connection between mining and the protection of environment in Tanzania laws, EMA has relevant provision for environment protection in Mining, Section 10 (4) (d) of the Mining Act,

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158 EMA, Part VIII
159 Ibid, Part IX
160 Ibid, Part X
161 Ibid, Part XIV
162 Ibid, Part XVI
163 Ibid, Part XV
164 Ibid, Sections 16-29.
165 Palangyo, D, Note 68 at p. 35
166 S.13 (1) of the Environment Management Act of 2004.
167 S. 80(2) and S. 107 of EMA, 2004
168 See S.13(2) perhaps the word 'shall' which does not give room for otherwise is found on powers of the minister to make regulations relating to Environmental Impact assessment under s. 82(1)

2010 provides that the Minister for Mineral Resources may enter into agreement called ‘development agreement’ in which among the things to be covered is environmental issues; similar provision is provided by Section 10 of the Mining Act, 2010. In addition Section 12 of the Mining Act, 2010 states that the ‘development agreement’ will be reviewed periodically after every five years, to evaluate compliance with the requirements contained therein.

Another important environmental aspect is the Environmental Impact Assessment (EIA) which is a scientific assessment of the possible positive or negative impact that a proposed project may have on the environment. The Mining Act, 1998 under Section 53 articulates the conditions which must be attached to a Mining License and these conditions covers environmental aspects including the requirement of EIA. The Mining (Environmental Management and Protection) Regulations, 1998 under Regulation 3 states that EIA will be conducted in every mining activity at the discretion of the Minister responsible for Mineral Resources.

However, EIA is now a mandatory requirement for mining projects, as per Section 81 of the Environmental Management Act, No. 20 of 2004, in that any proponent or developer of a project listed under the Second schedule to the Act is required to undertake an EIA, at his own cost. Mining is one of the listed projects. Section 232 of the Environmental Management Act provides that where any provision in the Act is in conflict or otherwise inconsistent with the provisions of any other law, the provision of the Act has to prevail.

The aspect to be looked at is Rehabilitation bond and protection of the environment, which is provided under Section 112(5) of the Mining Act, 2010, requires every investor to deposit a certain amount of money with the government for purposes of covering the costs of rehabilitation of mining sites after finishing the project.

4.7 Environmental Managerial Structure in Mainland Tanzania

Environmental management in Tanzania is a problem by the existence of two different types of legislation, for the Zanzibar Islands and the Tanzania Mainland. Though Tanzania is a federal state comprising Tanzania Mainland and Zanzibar, the later maintains administrative independence in most of its government matters. The National Assembly of the United Republic of Tanzania, which includes members from Zanzibar Islands, legislates on all matters such as foreign affairs, finance, defense, immigration and citizenship. All other matters concerning Zanzibar are within the exclusive jurisdiction of the revolutionary Government of Zanzibar and its legislative body that is the House of Representatives. On the side of Mainland Tanzania several organizations have been set up within the Ministry of Environment to administer the Environmental Management Act, No 20 of 2004. These are as follows:

- The National Environmental Advisory Committee (NEAC);
- The Directorate of Environment (DOE); and
- The National Environment Management Council (NEMC).

The Minister of Environment has the overall responsibility for all matters relating to the environment and for the formulation of policy for the promotion, protection and sustainable management of the environment in Tanzania[169].

4.7.1 The National Environmental Advisory Committee

Part III (a) of the Environmental Management Act, No 20 of 2004 sets out the composition, powers and functions of the National Environmental Advisory Committee (NEAC). The NEAC is an advisory body to the Minister on all matters relating to the protection and management of the environment and environmental degradation in mainland Tanzania. The NEAC is composed of members reflecting various fields of environmental management from the public and private sectors and civil society.

[169] S. 13 of the Environment Management Act, No 20 of 2004

4.7.2 Director of Environment

A Division of Environment was initially established under the NEMC Act in 1992, which became a full directorate in 1997. Part III(c) of the EMA sets out the roles and responsibilities for the Director of Environment (DoE) within the Ministry as follows:

- Coordination of various environmental management activities;
- Promotion of the integration of environmental considerations into development policies, plans, programmes, strategies and large development projects through the use of strategic environmental assessment (SEA);
- Provide advice to the government on legislative and other measures for the management of the environment or the implementation of relevant international agreements relating to the environment;
- Monitoring and assessment of activities to ensure that environmental management objectives are being adhered to;
- Prepare State of Environment Reports;
- Coordination of the implementation of the National Environmental Policy (NEP) as well as the environmental aspects of other sector policies.

4.7.3 National Environment Management Council

The National Environment Management Council (NEMC) was initially established in 1983 in terms of the National Environment Management Council Act, No 19 of 1983. Its composition, powers and functions have been rearticulated in Part III (d) of the Environmental Management Act of 2004. The NEMC is a corporate body with all the legal powers of such. Its objectives are to undertake the enforcement, compliance, review and monitoring of Environmental Impact Assessments (EIA) in Tanzania mainland, including facilitation of public participation processes in environmental decision-making.

The functions of the NEMC include:

- Carrying out environmental audits of projects and programmes;
- Carrying out environmental surveys;

- Undertaking and coordinating research;
- Reviewing and making recommendations for approval of environmental impact statements (EISs);
- Enforcement and compliance monitoring of national environmental quality standards;
- Initiation and development of procedures to prevent accidents which may cause environmental pollution and degradation;
- Development of public awareness and environmental education programmes;
- Publication of manuals, codes or guidelines relating to environmental management; and
- Rendering advice when required.

The NEMC comprises a Board, including a Chairman appointed by the Minister, the Director of Environment and seven other members. The Director- General (D-G) acts in the capacity of Chief Executive Officer.

It is to be noted that NEMC has play the monitoring role on Environmental **.**The NEMC, in consultation with the relevant line ministry or government agency, may undertake inspections to determine the nature and significance of actual impacts on the ground due to the implementation of the project, and whether the developer is complying with the required mitigation measures listed in the EIS and/or in the conditions of the EIA Certificate. Persistent noncompliance on the part of the developer could result in the NEMC making a recommendation to the Minister to revoke the EIA Certificate and to institute legal proceedings for any damages which may have occurred as a result of such non-compliance.[170]The monitoring requirements and the form and frequency of providing monitoring reports are set out in detail in Part XI of the EIA and Audit Regulations.

[170] S. 99 and 100 of the EMA

4.7.4 Intersectoral Cooperation

Intersectoral cooperation is achieved through the establishment of an environmental section in each line ministry, headed by a Sector Environmental Coordinator.[171]Each Environmental Section is responsible for:

- Ensuring compliance by the line ministry with the EMA
- Ensuring all environmental matters contained in other laws falling under the jurisdiction of the sector Ministry are implemented and reported to the DoE;
- Act as a go-between with the DoE and NEMC on all environmental matters in order to achieve cooperation and shared responsibility for environmental governance of specific relevance to the administration of EIA,
- Conduct strategic environmental assessments (SEAs) on sectoral legislation, regulations, public participation and strategies developed by the sector ministry;
- Ensure that sectoral standards are environmentally sound;
- Oversee the preparation and implementation of EIAs for investments in their sector;
- Ensure compliance with various regulations, guidelines and procedures relating to environmental management; and
- Submit a biannual report to the DoE on the state of environmental management in their sector.

4.8 Conclusion

It is the conclusion of the chapter that, Tanzania environmental structural management is seen to have been established for positive goal towards environmental protection. These authorities have been given some responsibilities which seem to be of well concern to the environment. Some of them have been entrusted responsibility of advising the government on implementation of the Environment laws. But, environmental problems still exist that prove lack of seriousness on those entrusted bodies.

[171] S. 3 (1) of the Environmental Management Act No 20, 2004

CHAPTER FIVE

FINDINGS AND ANALYSIS OF DATA

5.0 Introduction

This chapter is made purposely in finding basis behind intensive negative environment impact in mining areas. The discussion touched altogether with critical discussion on the enforcement and implementation of the environmental laws in protection of the environment. Further, the analysis was advanced in the course of discussion on the challenges facing Tanzania in the mining industry on environment. All in all the whole discussion is guided with the analysis of data collected from various sources of data collected by the researcher which base on the hypothesis formulated by the Researcher. Therefore, the researcher presents data collected from various divisions dealing with environmental themes; these are vice president office, division of environment, National Environmental Management Council (NEMC), Lawyers Environmental Action Team (LEAT) and from lawyers found in Arusha and Kilimanjaro. The findings based on the enforcement and implementation of the environmental laws in the protection of mining environment in Tanzania, in representing other developing countries. This chapter codify, tabulate, analyse and present data collected through questionnaires and scheduled interview which testified the hypothesis made for the study.

The main challenge associated with mining in Tanzania is ensuring sustainability and integrating environmental and social concerns into mineral development programmes. Sustainable mining requires balancing protection of the flora and fauna and the natural environment against the need for social and economic development. It appears this trade-off is not being achieved; several studies have documented negative environmental impacts associated with small and large-scale mining in Tanzania[172]. The 2001 Government Commission stated for example, that "while it is true that small-scale mining endangers the environment, it is also true that large-scale mining is even more

[172] Mwaipopo et al., 2004; Kulindwa et al., 2003; Van Straaten et al., 2000; Appleton et al., 2004; Drasch and Boese-O'Reilly, 2004; Law Reform Commission, 2001.

damaging"[173]. This is the conclusive evidence that mining activities are unfriendly to the environment. This is the problem facing mining industry in Tanzania.

5.1 Data Collected from different Tanzanian Lawyers

The researcher distributed fifteen (15) questionnaires to different lawyers in Arusha and Kilimanjaro. Out of those distributed questionnaires, only twelve questionnaires were collected back. The researcher chooses this category because they have knowledge to this study.

The response to the question *whether international environmental laws lack effective mechanisms in its enforcement and implementation in individual state*, 83 % of the respondent agreed that international environmental laws lack effective mechanisms in enforcement and implementation in individual state to protect the mining areas, only 27% disagreed with the question.

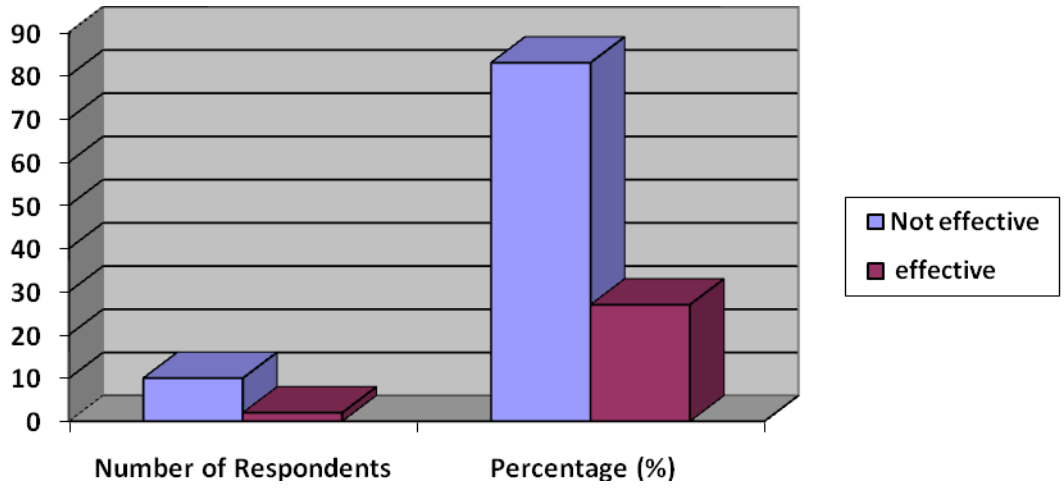
Table 5.1: Whether international environmental laws lack effective mechanisms in its enforcement and implementation in individual state.

Type of Response	Number of Respondents	Percentage (%)
Not effective	10	83
Effective	2	27
Total	12	100

Source: Research findings, field data results from questionnaires and interviews done on March 2013.

[173] Law Reform Commission, 2001, p.20

Figure 5.1: Whether international environmental laws lack effective mechanisms in its enforcement and implementation in individual state.



Source: Table 5.1

Responding to the question, *whether Tanzania environmental legislations, principally Environmental Management Act No 20 of 2004 does not include adequate provisions to enable efficient enforcement and implementation of environmental laws* 75% of the respondents give an affirmative response that environmental legislations principally Environmental Management Act, No 20 2004 does not include adequate provisions to enable efficient enforcement and implementation of environmental laws that is both domestic and international environmental laws. Arip Losai[174] argued that the reason for inefficient enforcement and implementation of environmental laws is because there are no specific provisions to ensure enforcement neither implementation of the laws. John Shirima[175] argued that environmental policy System of each individual state do not matched to universal environmental law that cause international environmental law lack effectiveness. This improper practise and implementation of the laws is contributed by

[174] A legal officer , Mughwai and Company Advocates
[175] Advocate, Shirima and Company Advocates

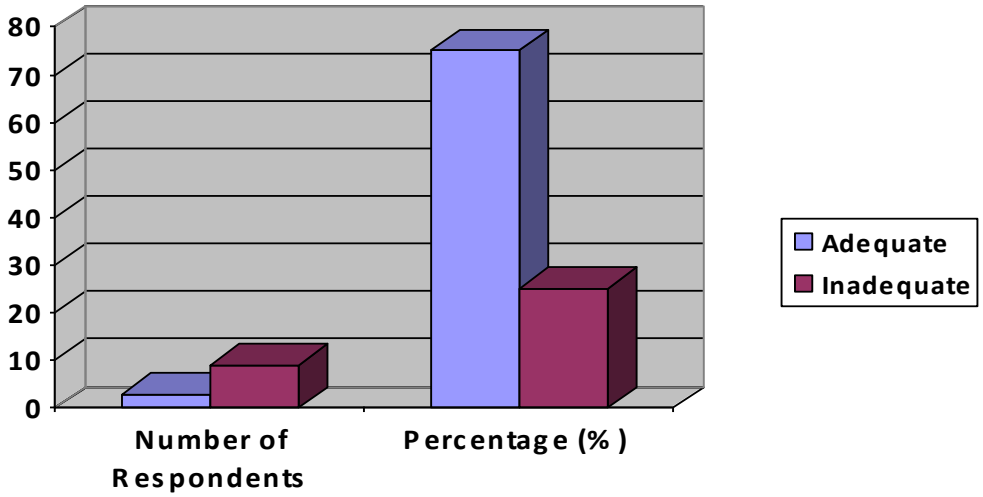
lack of knowledge and awareness on the part of the citizens to enforce their basic environment rights, Francis Robert Mhina[176] added that lack of adequate provisions is imaginably contributed with lack of proper trained law makers on the norms and principles of environmental law.

Table 5.2: whether Tanzania environmental legislations, principally Environmental Management Act no 20 2004 does not include adequate provisions to enable efficient enforcement and implementation of environmental laws

Type of Response	Number of Respondents	Percentage (%)
Inadequate	9	75
Adequate	3	25
Total	12	100

Source: Research findings, field data results, March 2013

Figure 5.2 Whether Tanzania environmental legislations, principally Environmental Management Act does not include adequate provisions to enable efficient enforcement and implementation of environmental laws



Source: Table 5.2

Whether enforcement of Tanzania environmental laws specifically the principal legislation that is Environmental Management Act 2004 sufficient enough to protect mining environment in Tanzania. 91.7 % of the respondents opined that enforcement of

[176] Resident Magistrate, Arusha District Court

Tanzania environmental laws is not sufficient to protect mining environment in Tanzania. Mackphan Bubeuwa [177]Argued that Environmental Management Act No 20 of 2004 provides very wide powers to minister to set regulations and rules on environment protection, which create a loophole for corruption practices, went further argued that the Act is not sufficient enough to protect mining environment in Tanzania because it gives loopholes also to miners to disregard environmental issues. Almost on the same line of argument S. Sammy Mollel [178]argued that the Tanzania environmental policies and laws are somehow clear but the problem lies with the enforcement machinery. Most of all blames were directed to NEMC which prove failure in fulfil its objectives.

Table 5.3: Whether enforcement of Tanzania environmental laws specifically the principal legislation that is Environmental Management Act 2004 sufficient enough to protect the mining environment in Tanzania

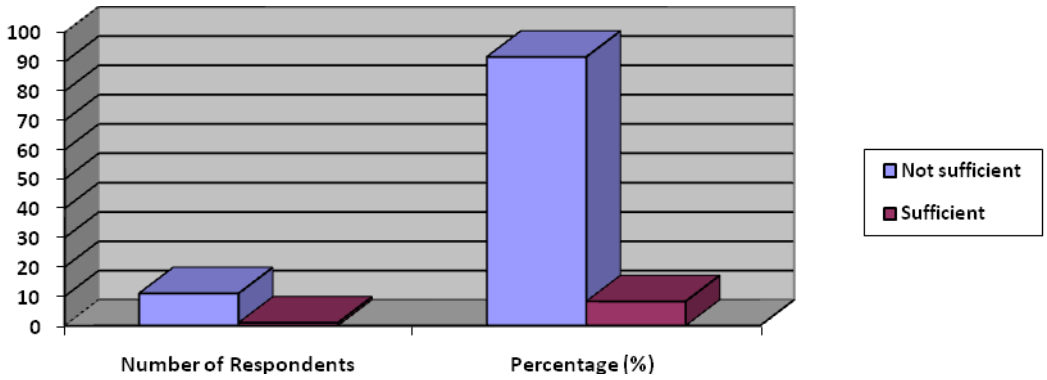
Type of Response	Number of Respondents	Percentage (%)
Not sufficient	11	91.7
Sufficient	1	8.3
Total	12	100

Source: Research findings, field data results from questionnaires and interviews on March 2013.

[177] Advocate of Tanzania Women Lawyers Association in Arusha branch office

[178] Managing Director of G R Gem and Rock Ventures Co. Ltd and The Chairman- Tanzania mineral Dealers Association (TAMIDA) interviewed on the 15th March 2013 at 12.30 noon

Figure 5.3 Whether enforcement of Tanzania environmental laws specifically the principal legislation that is Environmental Management Act 2004 sufficient enough to protect the mining environment in Tanzania



Source: Table 5.3

Responding to the question, *whether Tanzania has any challenge facing the enforcement and implementation of international environmental laws* 83% of the respondent give affirmative response that Tanzania has a lot of challenges facing the enforcement and implementation of international environmental laws, the big one is that most of the international environmental laws are not familiar to majority of Tanzanians including some of the lawyers as it is seen something stranger to them. Daudi Saimalie[179] pointed politics and self interest of those have vested authority in the mining sector are the main obstacle toward protection of mining environment as their main concern is not environment but gain form mining activities. To him this is a big challenge which is the result of the existing poor enforcement of the environmental laws as well as Tanzania mining Act of 2010. He went further blame the law makers as their take much concern in attracting foreign investors without put sharp provisions on environmental management for the future generation.

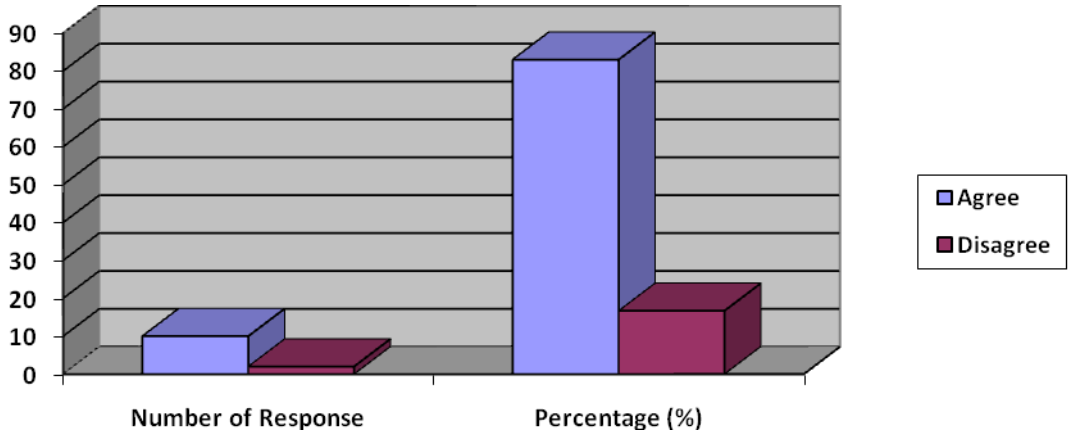
[179] A Legal officer , Tanzania mineral Dealers Association (TAMIDA)

Table 5.4 whether Tanzania has any challenge facing the enforcement and implementation of international environmental laws

Type of Respondent	Number of Response	Percentage (%)
Agree	10	83
Disagree	2	16.7
Total	12	100

Source: Research findings, field data results from questionnaires and interviews, March 2013

Figure 5.4 whether Tanzania has any challenge facing the enforcement and implementation of international environmental laws



Source: Table 5.4

Responding to the question, *whether the government of Tanzania provide enough support to the enforcement and implementation of international environmental laws in Tanzania* 66% of the respondent give negative response that the government of Tanzania does not provide enough support to enable the enforcement and implementation of international environmental laws. Ismail John Ayo[180] argued that, the government of Tanzania does not provide support to enable effective enforcement and implementation of the environmental laws, that is the reason for poor enforcement of the laws, went further arguing that the government put priority in harvesting natural resources without put concern on the adverse impacts on the environment. Sustain his

[180] Advocate of Tanzania Women Lawyers Association and a project officer of TAWLA

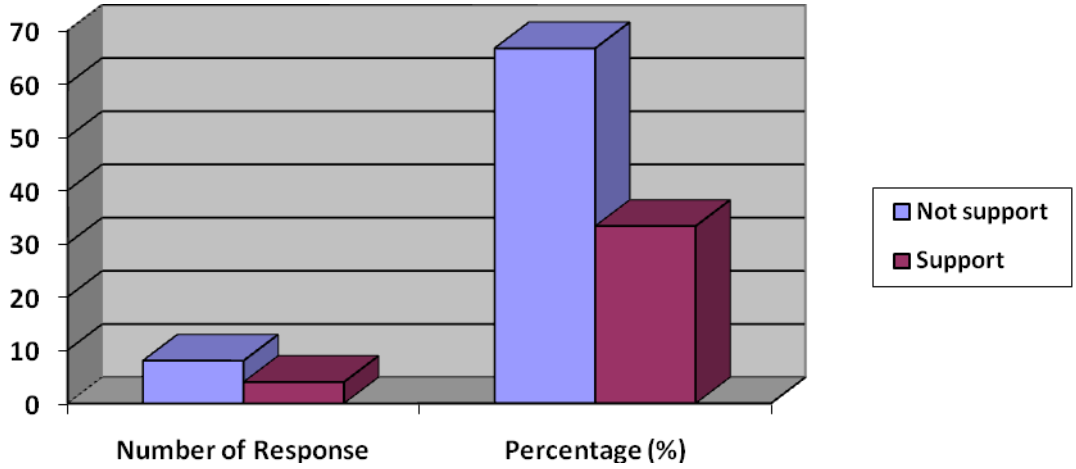
argument that if the government is real support the enforcement of the laws there could be minimal adverse impact on the mining areas. Amanda Evans[181] argued that because we have seen mining environment is not conducive which lead people and other living things surround the areas affected, this proves that even if there are laws but there is no support from the government to assure the law enforcer and law interpreter are in a well position to enforce the laws.

Table 5.5 whether the government of Tanzania provide enough support to the enforcement and implementation of international environmental laws in Tanzania

Type of Respondent	Number of Response	Percentage (%)
Not support	8	66.7
Support	4	33.3
Total	12	100

Source: Research findings, field data results from questionnaires and interviews, March 2013.

Figure 5.5 whether the government of Tanzania provide enough support to the enforcement and implementation of international environmental laws in Tanzania



Source: Table 5.5

Responding to the question, *whether the majority of Tanzanians including companies owners involving in mining do not understanding clearly the new trend of the economy which base on sustainability of the development activities* 83% of the respondents give

[181] A legal officer of Tanzania Women Lawyers Association

affirmative response that the majority of Tanzanians including companies owners involving in mining do not understanding clearly the new trend of the economy which base on sustainability of the development activities. Sammy Mollel[182] argued that majority of the companies owner of the mining industries do not clearly understanding absolutely the question of sustainable development, he went further saying that this is the problem facing mining sector as it cause miners to harvest minerals unsustainably with no concern to the environment of the present and the coming generation. He ended comment that some of the Tanzanians including also companies involving in mining are well familiar with the so called sustainable development but the problem for this category is lack of patriotism and most of them are driven by self interest.

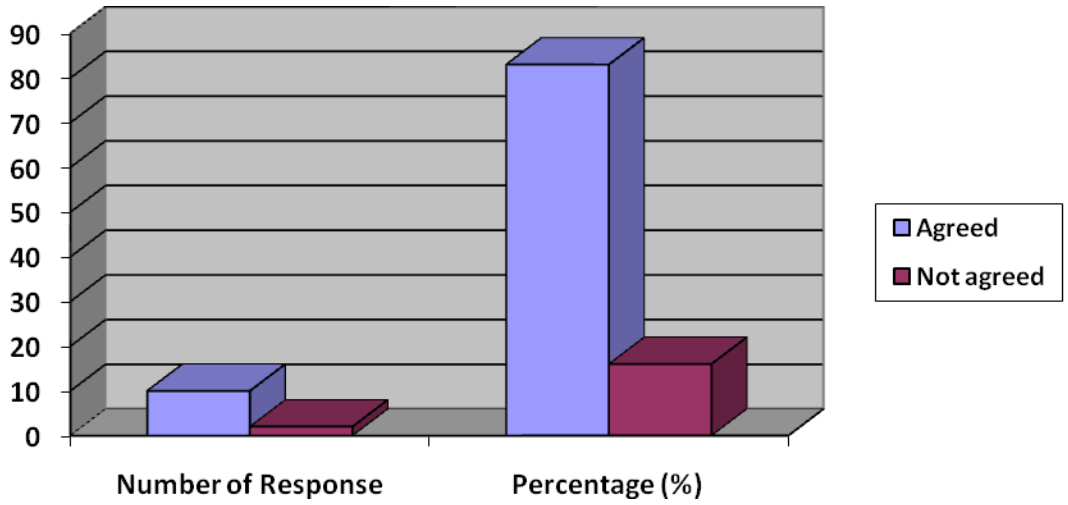
Table 5.6 whether the majority of Tanzanians including companies owners involving in mining do not understanding clearly the new trend of the economy which base on sustainability of the development activities

Type of Respondent	Number of Response	Percentage (%)
Agreed	10	83
Not agreed	2	16
Total	12	100

Source: Research findings, field data results from questionnaires and interviews, March 2013

[182] Managing Director of G R Gem and Rock ventures co. ltd

Figure 5.6 whether the majority of Tanzanians including companies owners involving in mining do not understanding clearly the new trend of the economy which base on sustainability of the development activities.



Source: Table 5.6

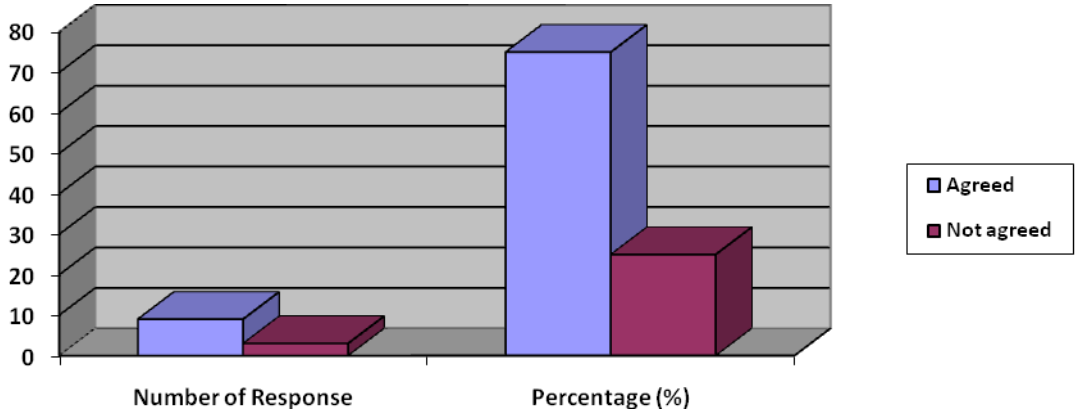
Responding to the question, *whether sustainable development especially in mining industries is not practiced in Tanzania* 75% of the respondents give affirmative response that sustainable development especially is not practiced in Tanzania.

Table 5.7 whether sustainable development especially in mining industries is not practiced in Tanzania

Type of Respondent	Number of Response	Percentage (%)
Agreed	9	75
Not agreed	3	25
Total	12	100

Source: Research findings, field data results from questionnaires and interviews, March 2013

Figure 5.7 Whether sustainable development especially in mining industries is not practiced in Tanzania



Source: Table 5.7

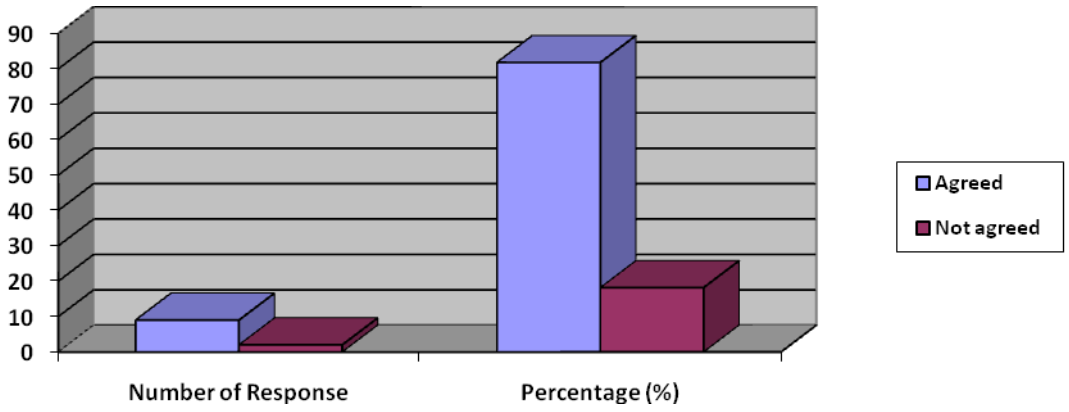
Responding to the question, *whether protection of mining areas in developing countries is characterized with poor precautionary measures.* 81% of the respondents give affirmative response that protection of mining areas in developing countries is characterized with poor precautionary measures.

Table 5.8 Whether protection of mining areas in developing countries is characterized with poor precautionary measures

Type of Respondent	Number of Response	Percentage (%)
Agreed	9	81.8
Not agreed	2	18.18
Total	11	100

Source: Research findings, field data results from questionnaires and interviews, March 2013

Figure 5.8 Whether protection of mining areas in developing countries is characterized with poor precautionary measures



Source: Table 5.8

5.9 Data Collected from Vice President Office, Environmental Division

The researcher conducted scheduled interview to the senior legal officer who represented the voice of the government. Moreover the researcher distributed ten questionnaires to other low ranking environmental officials. Unfortunately there was no positive response to those distributed questionnaires. The response to the question *whether international environmental laws lack effective mechanisms in its enforcement and implementation in individual state*, Isakwisa Lameck Mwamukonda,[183] agreed that international environmental laws lack effective mechanisms in its enforcement and implementation in individual state to protect mining areas. He said enforcement mechanisms cannot be relied on environmental protection due to poor judicial system and enforcement mechanism.

Conversely on the response to the question *whether Tanzania environmental legislations, principally Environmental Management Act does not include adequate provisions to enable efficient enforcement and implementation of environmental laws* [184]Isakwisa argued that the reason for lack of enforcement and implementation of

[183] A legal officer from VPO Environmental Division.
[184] A legal officer from VPO Environmental Division.

environmental laws is because despite of having some provisions on protection of environment but there is no explicit provisions to ensure enforcement and implementation of the laws.

Isakwisa in responding to the question, *whether the government of Tanzania provide enough support to the enforcement and implementation of international environmental laws* argued that the government of Tanzania does not provide support to enable effective enforcement and implementation of the environmental laws that is the reason for poor enforcement of the laws. He went further arguing that the government give priority in harvesting natural resources without consider adverse impact on environment.

Responding to the question, *whether the majority of Tanzanians including companies owners involving in mining do not understanding clearly the new trend of the economy Isakwisa* argued that majority of the companies owner of the mining industries do not clearly understanding the question of sustainable development, he went further saying that this is the problem facing mining sector in Tanzania as it cause the miners to harvest minerals unsustainably which cause environment degradation at a large.

5.10 Data Collected from Lawyers Environmental Action Team (LEAT)

A total of ten questionnaires were submitted to LEAT in this case representing Non Governmental organisations. Those questionnaires were distributed to legal officers and other environmental officers. Out of ten questionnaires only seven questionnaires were brought back which made the resourceful of 70%. The researcher interested with this non governmental organization so as to get the reaction of private institution on environmental protection.

The response to the question *whether international environmental laws lack effective mechanisms in enforcement and implementation in individual state,* 85.7 % of the respondents agreed that international environmental laws lack effective mechanisms in

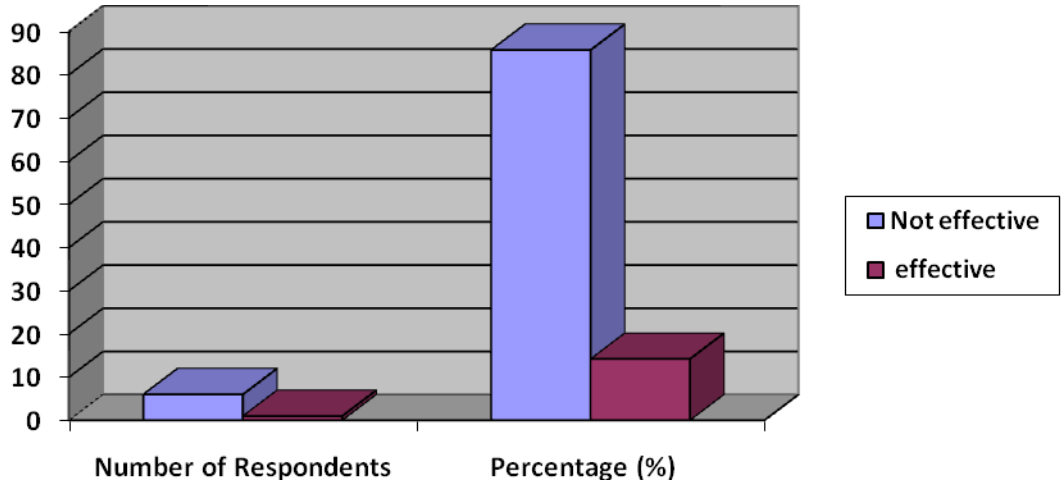
its enforcement and implementation in individual state to protect mining environment, only 14.2% disagreed with the question.

Table 5.9 Whether international environmental laws lack effective mechanisms in enforcement and implementation in individual state.

Type of Response	Number of Respondents	Percentage (%)
Not effective	6	85.7
Effective	1	14.2
Total	7	100

Source: Research findings, field data results from questionnaires and interviews April 2013

Figure 5.9: Whether international environmental laws lack effective mechanisms in its enforcement and implementation in individual state.



Source: Table 5.10

Responding to the question, *whether Tanzania environmental legislations, principally Environmental Management Act No 20 of 2004 do not include adequate provisions to enable efficient enforcement and implementation of environmental laws that is both national and international laws*, 100% of the respondents give an affirmative response that environmental legislations principally Environmental Management Act No 20 of 2004 do not include adequate provisions to enable efficient enforcement and

implementation of environmental laws. George Anthony[185] said that the reason for poor enforcement and implementation of environmental laws is because there are no enabling provisions to ensure enforcement of the laws.

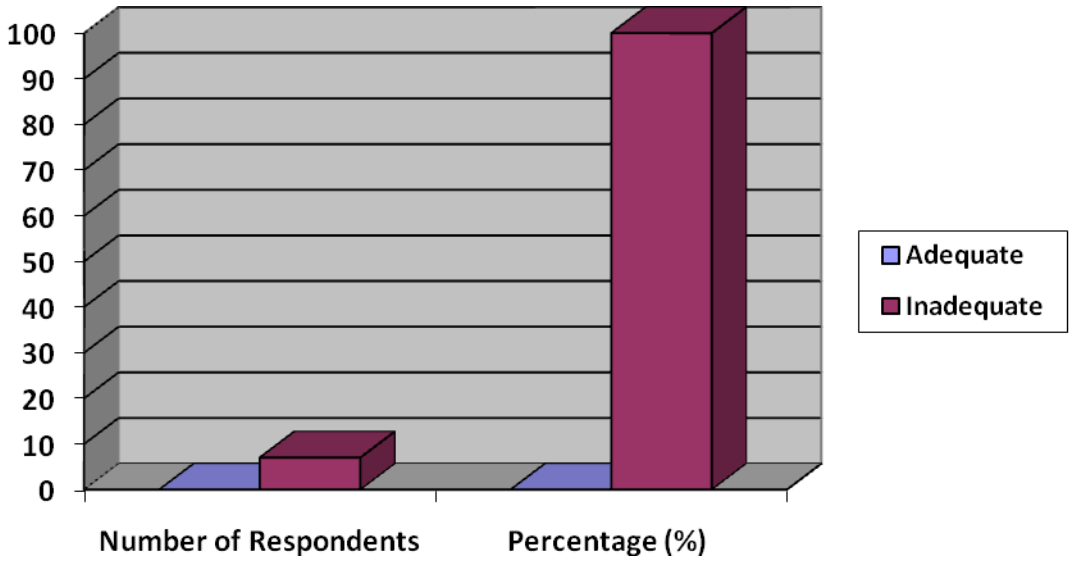
Table 5.10: Whether Tanzania environmental legislations, principally Environmental Management Act does not include adequate provisions to enable efficient enforcement and implementation of environmental laws that is both national and international laws.

Type of Response	Number of Respondents	Percentage (%)
Adequate	0	0
Inadequate	7	100
Total	7	100

Source: Research findings, field data results from questionnaires and interviews, April 2013

[185] A legal officer, LEAT

Figure 5.10 whether Tanzania environmental legislations, principally Environmental Management Act does not include adequate provisions to enable efficient enforcement and implementation of environmental laws that is both national and international laws



Source: Table 5.11

Whether enforcement of Tanzania environmental laws specifically the principal legislation that is Environmental Management Act 2004 is sufficient enough to protect the mining environment in Tanzania. 91.7 % of the respondents opined that enforcement of Tanzania environmental is not sufficient to protect mining environment in Tanzania. Beatrice Mukama[186] argued that Environmental Management Act, No 20 of 2004 provides very wide powers to minister to set regulation and rules on environment protection which create a loophole for malpractice. She went further saying that the Act is not sufficient enough to protect mining environment in Tanzania because it gives loopholes also to miners to disregard environmental issues.

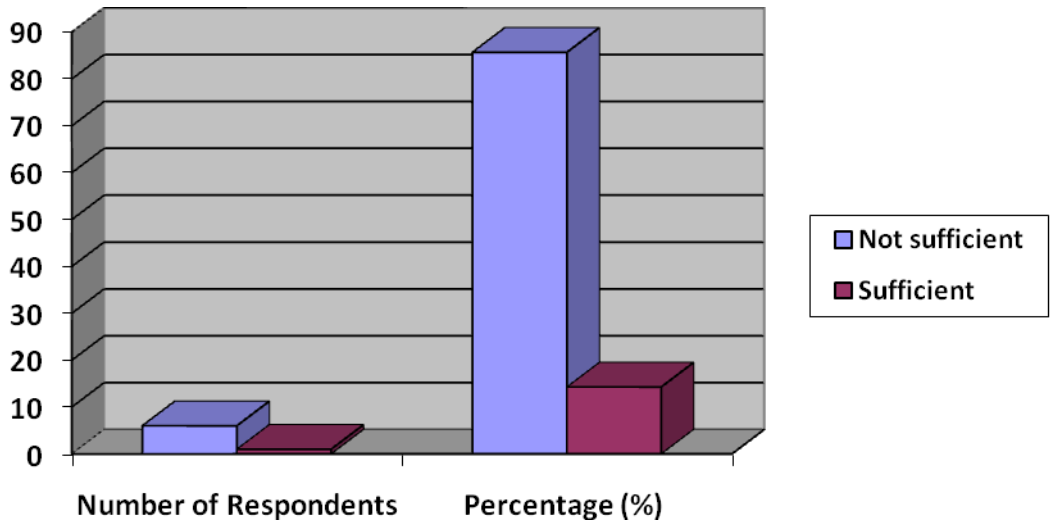
[186] A legal officer, LEAT

Table 5.11: Whether enforcement of Tanzania environmental laws specifically the principal legislation that is Environmental Management Act 2004 is sufficient enough to protect the mining environment in Tanzania

Type of Response	Number of Respondents	Percentage (%)
Not sufficient	6	85.7
Sufficient	1	14.28
Total	7	100

Source: Research findings, field data results from questionnaires and interviews on April 2013.

Figure 5.11 Whether enforcement of Tanzania environmental laws specifically the principal legislation that is Environmental Management Act 2004 is sufficient enough to protect the mining environment in Tanzania



Source: Table 5.12

Responding to the question, *whether Tanzania has any challenge facing enforcement and implementation of international environmental laws* 83% of the respondent give affirmative response that Tanzania has a lot of challenges facing the enforcement and implementation of international environmental laws and the big one is that most of the international environmental laws are not familiar to majority of Tanzanians including

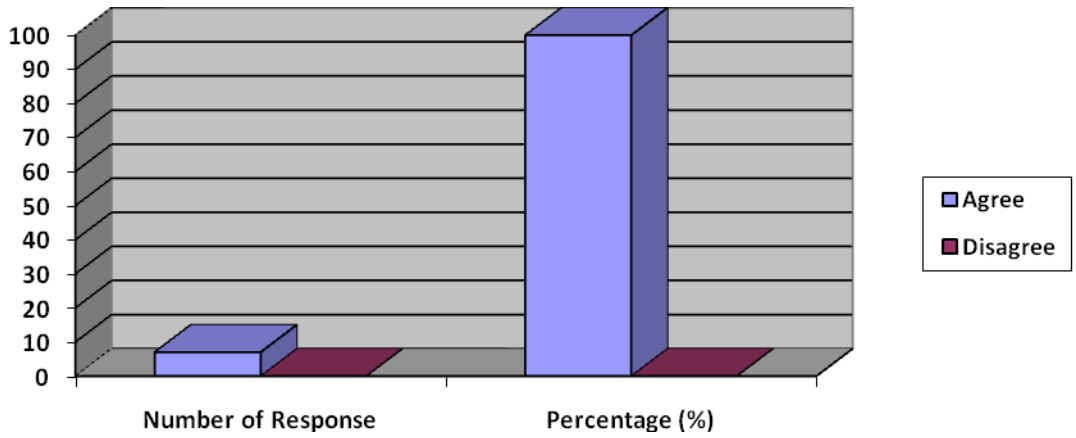
some of the lawyers as it is seen something stranger to them. Beatrice Mukama[187] pointed corruption in the mining sector is the main problem toward protection of mining environment as their main concern is not environment but the profit from mining.

Table 5.12 whether Tanzania has any challenge facing the enforcement and implementation of international environmental laws

Type of Respondent	Number of Response	Percentage (%)
Agree	7	100
Disagree	0	0
Total	7	100

Source: Research findings, field data results from questionnaires and interviews, April 2013

Figure 5.12 whether Tanzania has any challenge facing the enforcement and implementation of international environmental laws



Source: Table 5.13

Responding to the question, *whether the government of Tanzania provide enough support to the enforcement and implementation of international environmental laws in Tanzania* 66% of the respondent give negative response that the government of Tanzania does not provide enough support to enable enforcement and implementation

[187] A legal officer, LEAT

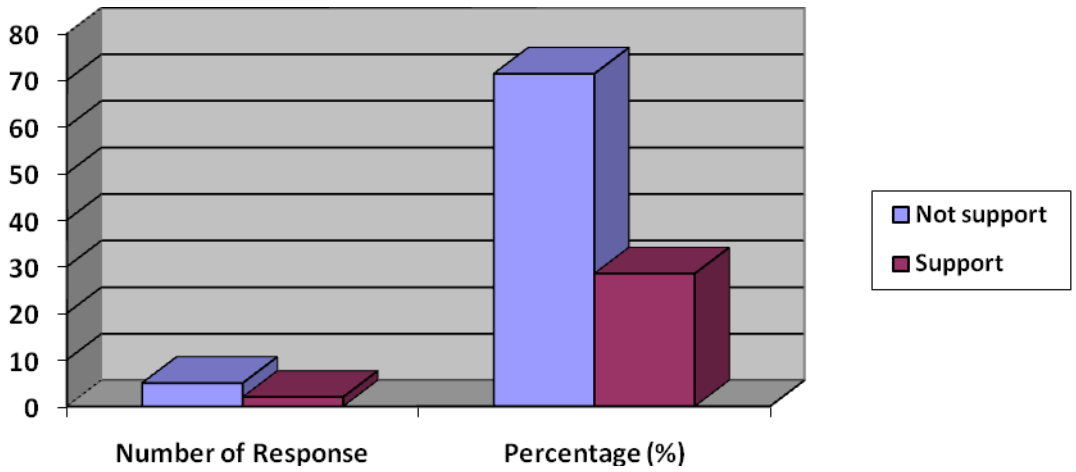
of international environmental laws. George Anthony[188] argued that the government of Tanzania do not provide support to enable effective enforcement of the laws that to him is the reason for poor enforcement of the laws.

Table 5.13 whether the government of Tanzania provide enough support to the enforcement and implementation of international environmental laws in Tanzania

Type of Respondent	Number of Response	Percentage (%)
Not support	5	71.4
Support	2	28.5
Total	7	100

Source: Research findings, field data results from questionnaires and interviews, March 2013

Figure 5.13 Whether the government of Tanzania provide enough support to the enforcement and implementation of international environmental laws in Tanzania



Source: Table 5.14

Responding to the question, *whether the majority of Tanzanians including companies owners involving in mining do not understanding clearly the new trend of the economy which base on sustainability of the development activities* 100% of the respondents give affirmative response that the majority of Tanzanians including companies owners

[188] A legal officer, LEAT

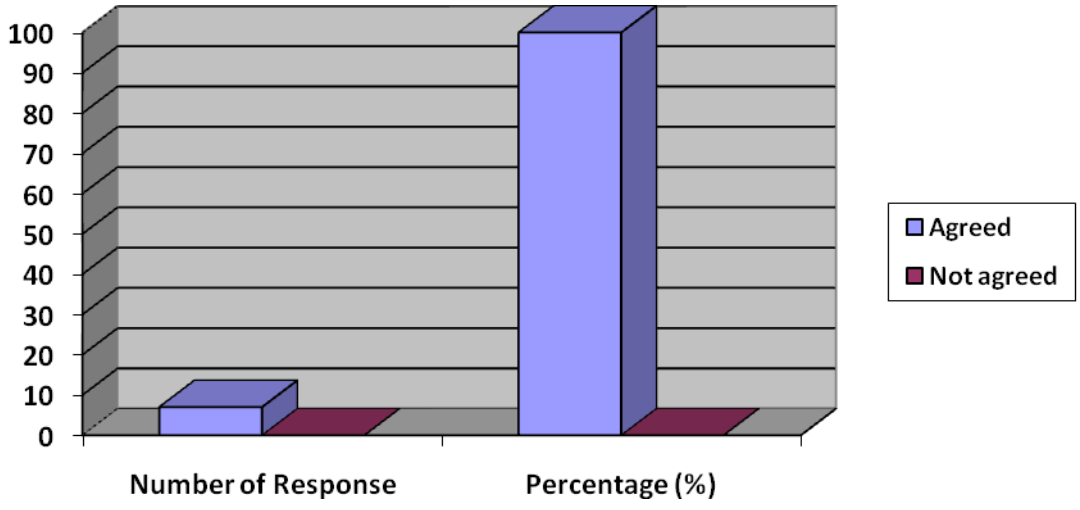
involving in mining do not understanding clearly the new trend of the economy which base on sustainability of the development activities. Beatrice Mukama commented that some of the Tanzanians including also companies involving in mining understanding what sustainable development is but the problem is lack of patriotism and self-centredness.

Table 5.14 whether the majority of Tanzanians including companies owners involving in mining do not understanding clearly the new trend of the economy which base on sustainability of the development activities

Type of Respondent	Number of Response	Percentage (%)
Agreed	7	100
Not agreed	0	0
Total	7	100

Source: Research findings, field data results from questionnaires and interviews, April 2013

Figure 5.14 Whether the majority of Tanzanians including companies owners involving in mining do not understanding clearly the new trend of the economy which base on sustainability of the development activities.



Source: Table 5.15

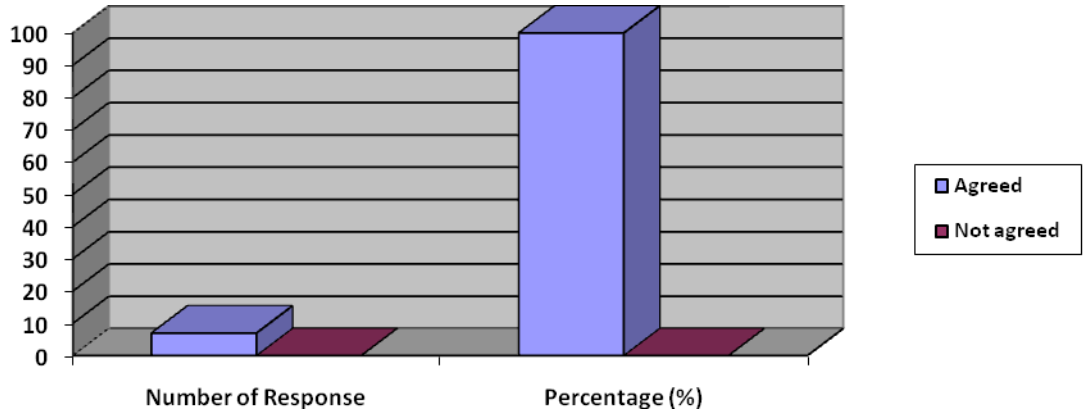
Responding to the question, *whether sustainable development especially in mining industries is not practiced in Tanzania* 100% of the respondents give affirmative response that sustainable development is not practiced in Tanzania.

Table 5.15 Whether sustainable development especially in mining industries is not practiced in Tanzania

Type of Respondent	Number of Response	Percentage (%)
Agreed	7	100
Not agreed	0	0
Total	7	100

Source: Research findings, field data results from questionnaires and interviews, March 2013

Figure 5.15 Whether sustainable development especially in mining industries is not practiced in Tanzania



Source: Table 5.16

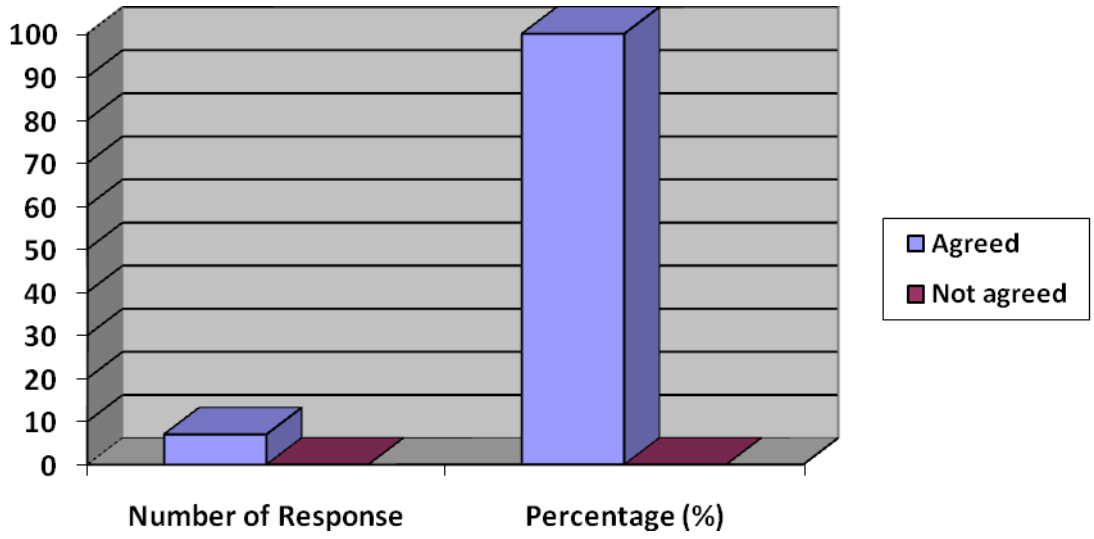
Responding to the question, *whether protection of mining areas in developing countries is characterized with poor precautionary measures.* 100% of the respondents give affirmative response that protection of mining areas in developing countries is characterized with poor precautionary measures.

Table 5.16 Whether protection of mining areas in developing countries is characterized with poor precautionary measures

Type of Respondent	Number of Response	Percentage (%)
Agreed	7	100
Not agreed	0	0
Total	7	100

Source: Research findings, field data results from questionnaires and interviews, March 2013

Figure 5.16 Whether protection of mining areas in developing countries is characterized with poor precautionary measures



Source: Table 5.17

5.17.1 Conclusion

This chapter presented the data which were collected from various offices. The data were collected through questionnaires and scheduled interview. The data were coded and analysed and presented into tables and graphs. The questions which were asked by the researcher had direct inference to the hypothesis which guide this research and the aim of those questions were to test the hypothesis from the data collected. The process of data collection has showed some challenges. The researcher circulated questionnaires

to various sector, few were brought back but unfortunately questionnaires sent to National Environment Management Council (NEMC) and to vice president office environmental division neither of them were collected back.

CHAPTER SIX
SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

6.0 Summary

This is the last chapter of the research paper, it gives a summary of the whole research paper and lastly it provides conclusion and recommendations of the research**.** The research involves the enforcement and implementation of the environmental laws as a means of environmental protection in mining areas. The research proves that environmental protection needs well implementable policies and enforceable laws, to ensure environment protection in mining areas.

Tanzania has a number of environmental laws together with attractive environmental policies but the country is faced with massive ecological humiliation especially in mining areas. Environmental adverse impact is a chaos in Tanzania which creates a risk of facing dissertation in a large scale in some few days to come, loss of biodiversity and diseases which will endanger life to human, other living organisms and entirely change of nature. The researcher intended to reveal the reason that cause existing laws to fail to create sound environment. The researcher visited different offices which have mandate in environmental management. The Researcher distributed questionnaires, and conducted scheduled interview as well as unstructured one.

Data were collected from vice president office, division of environment, Lawyers Environmental Action Team (LEAT), and from different lawyers in Arusha and Kilimanjaro. The data collected were scrutinised and analysed, where only useful data were taken, and then the useful data were coded and tabulated in their respective categories. After these data were made into tables, the researcher presents them into meaningful graphs to make easy to the researcher and a reader to understand the contents of the research.

This research was guided with four hypotheses which are as here under:

i. The enforcement and implementation of environmental laws in Tanzania is weak to protect mining areas.

ii. Tanzania mining laws does not well employed sufficient provisions in protecting environment.
iii. Tanzania environmental laws lack enforcement on precautionary measures.
iv. Poor means of enforcement has led to impracticable of sustainable development principle in Tanzania.

The first hypothesis which says that the enforcement and implementation of international environmental laws is weak to protect mining areas, this hypothesis intended to find the weakness of the existing laws on the enforcement and implementation of these laws in protecting environment. 83% of the respondents from Lawyers category, 85.7% of respondents representing LEAT and response from the Vise President office, division of environment answered in affirmative. They were both of the view that international environmental laws lack effective enforcement mechanisms to make environmental laws into practical that cause massive environmental degradation. The respondents pointed out some reasons for this failure that the judicial system is not well organized to hear environmental cases as special case like what commercial cases are taken in priority, together with lack of fund, lack of political will, corruption, and lack of public awareness in environmental matters.

The second hypothesis also proves in affirmative, the data collected reveals as follows: 75% of the respondent from LEAT, 100% respondent representing Lawyers and 100% supported by the Vice President Environmental division, was of the view that massive environmental degradation in Tanzania especially in mining areas is due to lack of adequate provisions in the existing environmental laws which assure the laws are enforceable and implemented sufficiently in protecting environment.

The third hypothesis however proves in affirmative, 83% from Lawyers category, 99% from lawyers' category and 98 % from vice president office. Almost their supported their views that Tanzania lack precautionary measures that cause most of the development activities unfriendly to the environment.

The fourth hypothesis which reads sustainable development is impracticable in mining activities in Tanzania, 75% from lawyers, 85.7 from LEAT and 100% from the Vise President Office, environmental division gave affirmative response.

6.1 Conclusion

After critical analysis of the nature of the research problem, it is concluded that, environmental laws in Tanzania do not have control mechanisms sufficiently to assure effective enforcement and implementation of various environmental laws that is to say both municipal laws and international treaties accorded by Tanzania. That is, there are no enabling provisions in the Tanzania laws concern to environmental protection, which could make effective enforcement and implementation of environmental laws in Tanzania. The findings show that for environmental legislation in mining, "the problems that limit effective enforcement of the regulations are a result of the weaknesses inherent within the legislation itself, and those associated with the system responsible for its execution[189].

Likewise, it is further concluded that, Mining Act, 2010 does not put much concern on the environmental protection rather than encouraging mining activities which cause adverse impact on the environment. The Act does not include sufficient provisions to ensure that the activities of mining are not cause harm to the environment.

Further, the study proves that in Tanzania there is lack effective enforcement of environmental legislation. The administrative and political will of the enforcement agencies and the level of awareness of environmental laws to majority of Tanzanians is very poor. This unawareness is caused inter alia with the weakness of the government officials responsible in environmental matters, their fail to give public education on environmental matters, also the constitution of the country is not open to environmental rights and even environmental management is poor in term of executing its

[189] Mutagwaba (2006) studied the Tanzanian case

responsibilities, despite of the fact that no healthy environment no life at all as life depends on healthy environment.

6.2 Recommendations

Supported on field findings, literatures reviews, comments, opinion of various respondents both scholars and non scholars altogether results the conclusion of this research, thereafter, the conclusion has subsequently invites the researcher to come up with the following recommendations grouped into two categories, that is legal and general recommendations.

6.3 Legal Recommendations

6.4 Reviewing Mining Policy and The Mining Act, 2010

Review mining policy and laws to provide for fair and equitable sharing of mining resources, this is essential in assurance commitment to all beneficiaries in the protection of the mining environment as all people has/ or will be benefited to mining resources. It is recommended that the Mining Act of 2010 should be amended to limit huge statutorily power conferred to the Minister so to avoid bias and malt practice which cause the authority and other bodies to fail either maliciously or negligently to control problem in the environment in mining areas.

6.5 Amendment of Environmental Management Act, 2004

It is recommended that, the Environment Management Act, 2004 should be clearly amended to include some important enabling provisions to make practically possible in enforcement and implementation of environmental laws to ensure protection of the environment. Further as it is seen that environment is life and without health environment there could be no life, it is highly recommended to the lawmaker to rethink and make amendment to include provision which will facilitate the establishment of workable environmental division in the court of law, dealing at the highest speed in litigation, with maximum due diligence in environmental issues.

6.6 Constitutional Amendment to include Environmental Rights.

It is recommended that the Constitution of the United Republic of Tanzania to be amended to include exhausted provisions on environmental protection. The only existing provision in the constitution is not expressly to ensure protection of environment. Tanzania can use an example of Republic of South Africa Constitution which includes detailed and exhaustive environmental rights and environmental administration in generality. The constitution should include environmental rights as among the basic right to human being.

6.7 Reshuffle of Tanzania Environmental Institutions

It is recommended that the government of Tanzania should reform environmental institutions to enable these institutions to have power for enforcing and implementing environmental law including some authority to impose sanction to environmental unfriendly activities. NEMC should be given enough resources including human resources competent to perform their duties at the highest standard. Moreover, each district to have workable and committed environmental committee with no element of politics which will be responsible for the environmental protection.

6.8 Make Specific Provisions for Small Scale Mining

It is recommended that governments should clearly promote formalization of the mining sector. The government should make specific provisions for regulating small-scale mining in national regulations, with a special focus on environmental management .This is because in Tanzania there are also small scale mining which also contributes much on causing environmental impact, small scale mining is not only done in Tanzania but to almost all countries specifically developing countries with resources based economy. There fore making regulations to guide them will be essential step towards environmental management.

6.9 Making Practical Enforceable Environmental Laws

It is recommended that the policy maker should ensure that regulatory mechanisms are adapted to local realities. Those laws and regulations made should be realistic and implementable.

6.9.1 Improving Spirit of Cooperation between States in Implementing International Environmental Laws

It is the recommendation of the researcher that, states should adopt the spirit of cooperation so as to make practically enforcement and implementation of international law as it is seen international environmental laws. It is only through co operation with the common goal of protecting environment against development activities which cause adverse impact on the environment will rescue the world be out of the danger of being diminished.

6.9.2 Lesson from Other Jurisdiction on the Laws on Environmental Management

It is highly recommended that, Tanzania and other developing countries should make tour on laws of other jurisdiction to see how their laws function in the environmental protection of mining areas. This includes visiting constitution of other countries, for example South Africa constitution which includes expressly provision on environment.

6.9.3 Provides Education on Environmental Laws to the Public

It is recommended that education creates awareness, this is very important because giving education to public on environmental laws their will be aware of the main objective of environmental laws. This may invites them to see important of obeying various environmental laws.

6.9.4 Inclusion of Enforceable Provisions on Land Reclamation on Mining Contract

The government while concluding contract with mining industries should include provisions which requires investor to agree after mining contract lapse the owner will

be due bound to do land reclamation by giving certain percentage of the profit regardless whether the company got a profit or not to facilitate the process in the future.

6.9.4.1 Establishment of the Special Environmental Tribunal

It is recommended that the government of Tanzania to establish workable special tribunal with well equipped lawyers' responsible only to environmental cases, this can be the solution on environmental problem in Tanzania. And not only could that but there be laws which are enforceable to the tribunal.

6.9.5 General Recommendations

6.9.6 Economy Concern

It is recommended that the government of Tanzania and other developing countries should recognize that their income is based on the natural resources such as minerals. Therefore, for this reason they are supposed to put much concern on the manner suitable of harvesting their natural resources. It is time for these countries to emphasis and make strict regulations which advocates on sustainable development.

6.9.7 Co Operation between Different Stakeholders

It is recommended that, government authorities, large scale miners and small scale miners and traders should work together towards effective environment protection on mining areas for the well concern that all of them get benefit from mining industries. It is good for them to value environment as from environment is where they get their profits.

6.9.8 Giving Prioritizing on Training and Assistance

It is recommended to environmental organizations, environmental institutions, development organizations and researchers to design initiative that focus on proactive environmental stewardship; this means prioritizing training and assistance rather than classic enforcement of the laws. This may be among of workable solutions on the problem of enforcement and implementation of environmental laws.

6.9.9 Development Programs to Be Established By the Government

It is recommended that the government and private development agencies should develop programs that assist miners in using cleaner manufacturing methods, by optimizing current production techniques, for example the uses of drilling and explosive method in extraction of gemstone.

6.9.9.1 The Use of Researchers by the Government in Different Economic Sectors

It is recommended that the government should employ Researchers to invent simple environmental reclamation processes. Mining industry should determine ways of funding land reclamation as a result of past gemstone mining activity which caused land degradation.

6.9.9.2 Priority to Indigenous of Tanzania in Mining Industries

It is recommended that, the government of Tanzania to thinks more wisely on the precious minerals and deeply focus its mind to unique mineral on the land that is Tanzanite. There is a need for the government to consider the way of make Tanzanite to be of advantages to Tanzanian as unique mineral in the World. To do so there is a need to give Tanzanians that is to say small scale miners the tasks of harvesting this mineral rather than inviting big power who harvest large quantity resulted to low price to Tanzanite. And by give Tanzanians first priority it will encourage them to see the need of protecting mining environment for the present and coming generation.

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APPENDICES

APPENDIX I: QUESTIONNAIRES TO LAWYERS AND OTHER EXPERTS

Dear Respondent, I am Emmanuel Laban Kileo a candidate of Mzumbe University in Morogoro , pursuing a Master Degree in Laws(LL.M-International Law) doing a research entitled, " ***enforcement and implementation of environmental laws and the protection of mining areas in Tanzania: a case study of Mererani for the academic year 2012/2013***

According to National Environmental Policy, 1997, the key policy instruments and strategies for achieving sustainable development include environmental impact assessment, environmental legislations and others subsidiaries laws, case laws as well as various international environmental laws relevant in mining areas including Mining legislations as well as various international environmental principles and declarations both aimed to protect environment but still the world is experiencing massive ecological problems, these problems pressurized the researcher to conduct the research as it reads herein above.

The success of the this research depends much on your highly appreciated assistance, in that regard, may I request your precious and valuable limited time to respond to the questionnaires put before you to the best of your knowledge for the wellbeing of this generation and the coming one as well as other living creatures as the success of this research might contribute something in the entire goal of protecting the environment.

Frankly speaking, I declare that the information obtained will be for academic purpose only.

Thank you in advance for your valuable assistance

PART A

PARTICULARS OF THE RESPONDENT

NAME:……

GENDER:……

AGE: between a) 18-30 years

b) 31-45 years c) 45 and above

OCCUPATION:……..

ADDRESS…….

DATE ……..

PART B: QUESTIONS

General Instruction

Please locate √ for the right answer and for the multiple choice questions.

Do you agree that international environmental laws lack effective mechanisms in its enforcement and implementation in individual state?

a) Yes I agree b)No I don't agree

c) I don't know d) I am not sure

Do you agree that Tanzania environmental legislations, principally Environmental Management Act does not include adequate provisions to enable efficient enforcement and implementation of environmental laws that is both national and international environmental laws?

a) Yes I agree

b) No I don't agree

c) I don't know

d) I am not sure

Please in whichever answer give reason(s)

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Is the enforcement of Tanzania environmental laws specifically the principal legislation that is Environmental Management Act sufficient enough to protect the mining environment in Tanzania? *Please give your opinion*

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What are the challenges facing the enforcement and implementation of international environmental laws in Tanzania? *Please mention few of them*

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Does the government of Tanzania provide enough environments/support to the enforcement and implementation of the environmental laws in assurance protection of the environment including mining areas. *YES/NO. If Yes or No please justify your answer briefly*

……

……

PART C:

MULTIPLE CHOICE QUESTIONS

Do you agree that majority of Tanzanians including companies' owners involving in mining do not understanding clearly the new trend of the economy which base on sustainability of the development activities?

a) Totally agree b) Agree c) Partially agree

d) Disagree e) Totally disagree f) None of the above

Do you agree that sustainable development especially in mining industries is not practiced in Tanzania?

a) Totally agree b) Agree c) Partially agree

d) Disagree e) Totally disagree f) None of the above

Do you agree that protection of mining areas in developing countries is characterized with poor precautionary measures

a) Totally agree b) Agree c) Partially agree

d) Disagree e) Totally disagree f) None of the above

Do you agree that enactment of new Environmental laws, the new Mining Act, as well as amendment of the existing laws will be possible solution for environment problems in Tanzania?

a) Totally Agree b) Agree c) Partially Agree

d) Disagree e) Totally Disagree f) None of the above

Do you agree that the Constitution of the United Republic of Tanzania of 1977as amended from time to time does not take positive concern on environmental matters?

a) Totally Agree b) Agree c) Partially Agree

d) Disagree e) Totally Disagree f) None of the above

PART D: OTHER ASSISTANCE

Dear respondent, you may wish to extend your intellectual assistance you think is relevant in this study to the researcher, this may include advice, criticisms, and other intellectual materials like text books, case laws, journals, articles and other information you think are necessary and may deem fit this work.

THANK YOU FOR YOUR COOPERATION and ASSISTANCE

PART E:

PARTICULARS OF THE RESEARCHER

NAME: Emmanuel Laban Kileo

INSTITUTION: Mzumbe University

FACULTY: Law

COURSE: LLM- International Law

PO. BOX 167 Moshi Mobile No. +255 0753 852943

Email: emakile@yahoo.com

APPENDIX II: QUESTIONNAIRES TO NATIONAL ENVIRONMENTAL MANAGEMENT COUNCIL (NEMC)

Dear Respondent, I am Emmanuel Laban Kileo a candidate of Mzumbe University in Morogoro, pursuing a Master Degree in Laws(LL.M-International Law) doing a research entitled, " ***enforcement and implementation of environmental laws and the protection of mining areas in Tanzania: a case study of Mererani for the academic year 2012/2013.***

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PART A

PARTICULARS OF THE RESPONDENT

NAME:……

GENDER:……

AGE: between a) 18-30 years

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Please in whichever answer give reason(s)

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What are the challenges facing the enforcement and implementation of international environmental laws in Tanzania? *Please mention few of them*

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Does the government of Tanzania provide enough environments/support to the enforcement and implementation of the environmental laws in assurance protection of the environment including mining areas. *YES/NO. If Yes or No please justify your answer briefly*

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PART C:

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Do you agree that the Constitution of the United Republic of Tanzania of 1977as amended from time to time does not take positive concern on environmental matters?

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COURSE: LLM- International Law
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Email: emakile@yahoo.com

APPENDIX III : QUESTIONNAIRES TO LAWYERS ENVIRONMENTAL ACTION TEAM (LEAT) and OTHERS

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THANK YOU IN ADVANCE FOR YOUR VALUABLE ASSISTANCE

PART A

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What are the challenges facing the enforcement and implementation of international environmental laws in Tanzania? *Please mention few of them*

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Does the government of Tanzania provide enough environments/support to the enforcement and implementation of the environmental laws in assurance protection of the environment including mining areas?

YES/NO

If Yes or No please justify your answer briefly

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PART C:

MULTIPLE CHOICE QUESTIONS

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PARTICULARS OF THE RESEARCHER
NAME: Emmanuel Laban Kileo
INSTITUTION: Mzumbe University
FACULTY: Law
COURSE: LLM- International Law
P. O. BOX 167 Moshi Mobile No. +255 0753 852943
Email: emakile@yahoo.com

APPENDIX IV: QUESTIONNAIRES TO THE VICE PRESIDENT OFFICE ENVIRONMENT DIVISION

Dear Respondent, I am Emmanuel Laban Kileo a candidate of Mzumbe University in Morogoro , pursuing a Master Degree in Laws(LL.M-International Law) doing a research entitled, " ***enforcement and implementation of environmental laws and the protection of mining areas in Tanzania: a case study of Mererani for the academic year 2012/2013***

According to National Environmental Policy, 1997, the key policy instruments and strategies for achieving sustainable development include environmental impact assessment, environmental legislations and others subsidiaries laws, case laws as well as various international environmental laws relevant in mining areas including Mining legislations as well as various international environmental principles and declarations both aimed to protect environment but still the world is experiencing massive ecological problems, these problems pressurized the researcher to conduct the research as it reads herein above.

The success of the this research depends much on your highly appreciated assistance, in that regard, may I request your precious and valuable limited time to respond to the questionnaires put before you to the best of your knowledge for the wellbeing of this generation and the coming one as well as other living creatures as the success of this research might contribute something in the entire goal of protecting the environment.

Frankly speaking, I declare that the information obtained will be for academic purpose only.

THANK YOU IN ADVANCE FOR YOUR VALUABLE ASSISTANCE

PART A

PARTICULARS OF THE RESPONDENT

NAME: ……

GENDER: ……

AGE: between a) 18-30 years

b) 31-45 years c) 45 and above

OCCUPATION: ……..

ADDRESS…….

DATE ……..

PART B: QUESTIONS

General Instruction

Please locate √ for the right answer and for the multiple choice questions

Do you agree that international environmental laws lack effective mechanisms in its enforcement and implementation in individual state?

a) Yes I agree b)No I don't agree

c) I don't know d) I am not sure

Do you agree that Tanzania environmental legislations, principally Environmental Management Act does not include adequate provisions to enable efficient enforcement and implementation of environmental laws that is both national and international environmental laws?

a) Yes I agree

b) No I don't agree

c) I don't know

d) I am not sure

Please in whichever answer give reason(s)

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.....

.....

Is the enforcement of Tanzania environmental laws specifically the principal legislation that is Environmental Management Act sufficient enough to protect the mining environment in Tanzania? *Please give your opinion*

……

……

What are the challenges facing the enforcement and implementation of international environmental laws in Tanzania? *Please mention few of them*

……

……

Does the government of Tanzania provide enough environments/support to the enforcement and implementation of the environmental laws in assurance protection of the environment including mining areas? *YES/NO. If Yes or No please justify your answer briefly*

……

……

PART C:

MULTIPLE CHOICE QUESTIONS

Do you agree that majority of Tanzanians including companies' owners involving in mining do not understanding clearly the new trend of the economy which base on sustainability of the development activities?

a) Totally agree b) Agree c) Partially agree

d) Disagree e) Totally disagree f) None of the above

Do you agree that sustainable development especially is not practiced in Tanzania?

a) Totally agree b) Agree c) Partially agree

d) Disagree e) Totally disagree f) None of the above

Do you agree that protection of mining areas in developing countries is characterized with poor enforcement of precautionary measures?

a) Totally agree b) Agree c) Partially agree

d) Disagree e) Totally disagree f) None of the above

Do you agree that enactment of new Environmental laws, the new Mining Act, as well as amendment of the existing laws will be possible solution for environment problems in Tanzania?

a) Totally Agree b) Agree c) Partially Agree

d) Disagree e) Totally Disagree f) None of the above

Do you agree that the Constitution of the United Republic of Tanzania of 1977as amended from time to time does not take positive concern on environmental matters?

a) Totally Agree b) Agree c) Partially Agree

d) Disagree e) Totally Disagree f) None of the above

PART D: OTHER ASSISTANCE

Dear respondent, you may wish to extend your intellectual assistance you think is relevant in this study to the researcher, this may include advice, criticisms, and other intellectual materials like text books, case laws, journals, articles and other information you think are necessary and may deem fit this work.

THANK YOU FOR YOUR COOPERATION and ASSISTANCE

PART E:

PARTICULARS OF THE RESEARCHER

NAME: Emmanuel Laban Kileo

INSTITUTION: Mzumbe University

FACULTY: Law

COURSE: LLM- International Law

P. O. BOX 167 Moshi Mobile No. +255 0753 852943

Email: emakile@yahoo.com

APPENDIX V: SCHEDULED INTERVIEW TO VICE PRESIDENT OFFICE, ENVIRONMENTAL DIVISION, NATIONAL ENVIRONMENTAL MANAGEMENT COUNCIL (NEMC), LAWYYERS / LEGAL OFFICERS IN MERERANI AND LAW FIRMS AND LEGAL AIDS INSTITUTION

PART A

PARTICULARS OF THE RESPONDENT

NAME: ……..

GENDER: ……

AGE:……

OCCUPATION….....

ADDRESS…….

DATE ……

PART B: QUESTIONS

Do you agree that international environmental laws lack effective mechanisms in its enforcement and implementation in individual state?

a) Yes I agree b)No I don't agree

c) I don't know d) I am not sure

Do you agree that Tanzania environmental legislations, principally Environmental Management Act does not include adequate provisions to enable efficient enforcement and implementation of environmental laws that is both national and international environmental laws?

a) Yes I agree

b) No I don't agree

c) I don't know

d) I am not sure

Please in whichever answer give reason(s)

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Is the enforcement of Tanzania environmental laws specifically the principal legislation that is Environmental Management Act sufficient enough to protect the mining environment in Tanzania? *Please give your opinion*

……

……

What are the challenges facing the enforcement and implementation of international environmental laws in Tanzania? *Please mention few of them*

……

……

Does the government of Tanzania provide enough environments/support to the enforcement and implementation of the environmental laws in assurance protection of the environment including mining areas? *YES/NO. If Yes or No please justify your answer briefly*

……

……

PART C:

MULTIPLE CHOICE QUESTIONS

Do you agree that majority of Tanzanians including companies' owners involving in mining do not understanding clearly the new trend of the economy which base on sustainability of the development activities?

a) Totally agree b) Agree c) Partially agree

d) Disagree e) Totally disagree f) None of the above

Do you agree that sustainable development especially in mining industries is not practiced in Tanzania.

a)Totally agree b)Agree c) Partially agree

d) Disagree e) Totally disagree f) None of the above

Do you agree that protection of mining areas in developing countries is characterized with poor precautionary measures?

a) Totally agree b) Agree c) Partially agree

d) Disagree e) Totally disagree f) None of the above

Do you agree that enactment of new Environmental laws, the new Mining Act, as well as amendment of the existing laws will be possible solution for environment problems in Tanzania?

a) Totally Agree b) Agree c) Partially Agree

d) Disagree e) Totally Disagree f) None of the above

Do you agree that the Constitution of the United Republic of Tanzania of 1977as amended from time to time does not take positive concern on environmental matters?

a) Totally Agree b) Agree c) Partially Agree

d) Disagree e) Totally Disagree f) None of the above

PART D: OTHER ASSISTANCE

Dear respondent, you may wish to extend your intellectual assistance you think is relevant in this study to the researcher, this may include advice, criticisms, and other intellectual materials like text books, case laws, journals, articles and other information you think are necessary and may deem fit this work.

THANK YOU FOR YOUR POSITIVE COOPERATION AND VALUABLE CONTRIBUTIONS.