

Ministry of Mining



Final Report (Main Report)

Strategic Environmental and Social Assessment (SESA) for the Mining Sector in Kenya









November 2017

DOCUMENT AUTHENTICATION

PROJECT TITLE: Strategic Environmental and Social Assessment (SESA) for the Mining

Sector in Kenya

CLIENT: United Nations Development Programme (UNDP-Kenya)

NAME AND ADDRESS OF FIRM OF EXPERTS

Habitat Planners

Physical Planners, Environment, Research and Development Consultants

Mercantile Hse, Rm 214, Koinange st, P.o. B.ox 10982 - 00108, Nairubi, Tel: 020-2242685, 0722-369133.

Website: www.habitatplanners.com, Email: info@habitatplanners.com

Registration No. of Firm of Experts - 0465

Signed:

Date: 15th November 2017

For: <u>Habitat Planners</u> Francis Mwaura (PhD) Lead EIA/SEA/Audit No. 0077

Attumer.

NAME AND ADDRESS OF CLIENT:

UNITED NATIONS DEVELOPMENT PROGRAMME United Narions Office in Nairobi UN Complex Gigiri Block N Level 3 P.O. Box 30218-00100 Nairobi, Kenya

Signed:

Date: 22nd November 2017

For: United Nations Development Programme

Patrick Maingi

Programme Officer, Inclusive Economic Growth



SESA IMPLEMENTATION TEAM

Consultants

	Name	Expertise	Responsibility	
1.	Dr. Francis Mwaura PhD, M.Sc, B.Sc (Geography & Environmental Studies), University of Nairobi & McGill University (Canada)	Environmentalist/ NRM expert	PPP analysis, mining EIAs, overall documentation ordination (Team Leader)	
2.	Philip Oguba Wandera, MA (Environmental Economics), Moi University, Post Graduate Diploma (Education), University of Nairobi, Diploma (Business Management), Business Management Association, London United Kingdom, BA (Economics and Rural Economy), Makerere University	Community development professional	Community and grass-root engagement and consultation	
3.	James Mutimu Ndungu B.Sc. (Botany & Zoology), MA (Environmental Planning & Management)	Environmentalist	Stakeholder engagement and lead consultations facilitator	
4.	Professor John Warui Kiringe (PhD, M.Sc, B.Sc, Ecology), Leicester University (UK) University of Nairobi	Environmentalist	Governance capacity assessment	
5.	Dr. Robert Kibugi , Doctor of Laws, (University of Ottawa, Canada), Master of Laws (University of Nairobi), Bachelor of Laws (University of Nairobi)	Public administration professional	Governance framework analysis	
6.	Dr. James Gichuru Kariuki , Ph.D (Sociology) M.A., (Sociology), & B.A. (Sociology and Geography), University of Nairobi	Social development professional	Stakeholder engagement	

Support team

	Name				Position	Tasks	
1	. Tiffany Nairobi	Mwake	(B.Ed.),	University	of	Lead office and field assistant	Office assistant and workshop secretariat
2	. Sharon Nairobi)	Mwende	(BA),	University	of	Office and field assistant	Office work and field work



LIST OF ABBREVIATIONS

ACC Assistant County Commissioner ALPs Alternative Livelihoods Plans

AMV Africa Mining Vision ARM Athi River Mining

ASALs Arid and Semi-Arid Lands

ASM Artisanal and Small-Scale Mining

ASSM Association of Artisanal and Small-Scale Miners

AU Africa Union

CBA Cost Benefit Analysis

CBD Convention on Biological Diversity
CDA Community Development Agreements
CEAP County Environment Action Plan
CECs County Environment Committees
CFAS Community Forest Associations
CIDP County Integrated Development Plan
COTU Central Organization of Trade Unions

CSO Civil Society Organizations
CSR Corporate Social Responsibility

DG Director General

DOSHS Directorate Occupational Safety and Health Services

DRSRS Directorate of Resource Surveys and Remote Sensing (DRSRS)

DRU Disaster Response Unit
EA Environmental Audit
EAC East African Community
EEZ Exclusive Economic Zones

EIA Environmental Impact Assessment EIK Environmental Institute of Kenya

EITI Extractive Industries Transparency Initiative
EMCA Environmental Management and Coordination Act
EMMP Environmental Management and Monitoring Plan

EMP Environmental Management Plan ERP Environmental Rehabilitation Plan

ESCP Ecosystem and Species Conservation Plan ESS Environmental and Social Screening

ETSPs Employment, Training and Succession Plans

FGD Focused Group Discussion
GDP Gross Domestic Product
GoK Government of Kenya

GRM Grievance Redress Mechanism

HIV/AIDS Human Immuno-Deficiency Virus/Acquired Immuno Deficiency Syndrome

HR Human Rights

ICT Information Technology Communication

IDP Internally Displaced Persons
IFC International Finance Corporation
ILO International Labour Organization

KCM Kenya Chamber of Mines

KEPTA Kenya Petroleum Technical Assistance Program

KFS Kenya Forest Service
KIS Key Informants



KNBS Kenya National Bureau of Statistics

KNHCR Kenya National Commission for Human Rights

KWS Kenya Wildlife Service

LN Legal Notice

LED Local employment plan MCO Mining Cadastre Office MCPs Mine Closure Plans

MEA Multilateral Environmental Agreement

MENR Ministry of Environment and Natural Resources

MOM Ministry of Mining

NACC National Aids Control Council

NBSAP National Biodiversity Strategy and Action Plan NCCRS National Climate Change Response Strategy

NDOC National Disaster Operation Centre NEAP National Environment Action Plan

NEMA National Environment Management Authority

NET National Environment Tribunal

NGDP National Gender and Development Policy

NGO Non-Governmental Organizations

NLC National Land Commission NLP National Land Policy

NMC National Mining Corporation OMC Online Mining Cadastre OSH Occupational Safety and Hea

OSH Occupational Safety and Health PCM Public Consultation Meeting PIEA Petroleum Institute of East Africa

PPGs Personal Protective Gears
PPP Policies, Plans or Programme
PPPU Public Private Partnership Unit

PSR Project Study Report

PTC Project Technical Committee
RERU Rapid Environment Response Unit

RPB Radiation Protection Board SCM Stakeholder Consultation Meeting

SDG Stakeholder Consultation Meeting SDG Sustainable Development Goals

SEPA Swedish Environmental Protection Agency
SESA Strategic Environmental and Social Assessment

SHIA Social Heritage Impact Assessment STD Sexually Transmitted Disease

SIDA Swedish International Development Corporation Agency

Tore Terms of Reference

UDHR Universal Declaration of Human Rights

UNCCD United Nations Convention to Combat Desertification UNCRC United Nations Convention on the Rights of the Child

UNDP United Nations Development Programme

UNFCCC United Nations Framework Convention on Climate Change

WMP Waste Management Plan

WRMA Water Resources Management Authority

WRUAs Water Resource Users Association ZOPA Zone of Possible Agreement



ACKNOWLEDGEMENTS

Habitat Planners is extremely grateful to a wide range of people and institutions for their invaluable support in terms of information, ideas and directions without which this Policy SESA would not have been accomplished. Many thanks to the UNDP team in Nairobi especially Patrick Maingi (Programme Officer, Inclusive Economic Growth), David Githaiga (Team Leader, Energy Environment and Climate Change), Margaret Mbugua (Procurement Manager), Fredrick Obade and Bernadette Ndeda for supporting the work right from the beginning to the end including the facilitation for field missions in Kwale and Kitui.

The support given by Ministry of Mining is appreciated and acknowledged. Many thanks to the Principal Secretary, Dr. Ibrahim M. Mohamed, CBS, Raymond Mutiso (Director of Mines), Richard Boiyo, Henry N. Kamunge (Principal Geologist, MoM, Nairobi), and Gregory Kituku. Similarly, the support given by NEMA with acknowledgements especially to Mr. Zephaniah Ouma (Director C & E), Maureen Njeri (C & E), Dr. Diana Mobagi (CDE Kitui), Oceanic N. Sakwa (SESA section), Selelah A. Okoth (SESA section), Marrian Kioko (Senior Compliance and Enforcement Officer), Edward Wabwoto (Senior Legal Officer), Reagan Awino (Environmental Audit Section), Veronica Maina (C & E, NEMA), Dr. Catherine Mbaisi (Chief EEI, NEMA), Eric Deche (NEMA), Paul Nguru (EPRC Department) and Gideon Rotich (EIA Section). The consultants are grateful for the useful inputs provided by a wide range of external reviewers especially Sanna Due, Ann Cathrin Pedersen and Sadamistu Sakoguchi (UNDP-ECG).

The consultants are grateful for the time shared, information and ideas given by a wide range of stakeholders in Nairobi, Kwale and Kitui. It is not possible to list all of them but we wish to highlight the following: Moses Nieru (CEO, Kenya Chamber of Mines), Rose Kimotho (Institute of Business and Human Rights), Elizabeth Kariuki (KHRC), Anthony Githinji (COTU-K, Nairobi), Brian Muthoka (Council of Governors, Nairobi), Emmanuel Simiyu (KFS, Nairobi), Kenneth Niuguna (Assistant Director, DOSHs, Nairobi), Joan Kiraithe (Geological Society of Kenya), Irene Kendi (COTU-K), Rebecca Abonyo (COTU-K), Lawrence Marumbe (Ministry of Mining, Nairobi), Abel K. Chumba (Ministry of Mining, Nairobi), Jael Amati (Groots-Kenya), Benson Kiptum (APDK, HQ), Mr. Ali Mafimbo (County Executive for Lands, Environment and Physical Planning, Kwale County), Dr. Mohammed Pakia (Chief Officer for Physical Planning, Lands and Natural Resources, Kwale County), Madam Redemta Muende (Kwale Chief Public Health Officer, Kwale), Hannak K. Dupha (Sub-County Public Health Officer, Matuga Sub-County, Kwale), Rodgers M. Mweruphe (Planning Officer, Kwale County Government), Noel Ndeti (WRMA, Kwale), S. Wakaba (Senior Warden, Shimba Hills National Reserve), Mr. Ali Mohammed (Coordinator Kwale Natural Resources Network), Collins Forbes (General Manager, Base Titanium), Dr. Georgina Jones (Environment Manager, Base Titanium), Micah Muema (Environment Officer, Base Titanium), Arthur O. Ndegwa (Dean of Engineering School of Mines, Taita Taveta University), Suleiman Mwalifani (Program Coordinator, Haki Yetu), Madam Jane Katuse (Deputy County Commissioner, Nairobi County), Odidi Otieno (Deputy County Commissioner, Kitui Central), J.K. Tumo (Deputy County Commissioner, Mutomo), Jakob M. O. Ouma (Deputy County Commissioner, Ikutha), Benjamin Mukulo (Deputy Director Minerals Investments, Energy and Environment, Kitui County Government), Joseph Munywoki (Sub Regional Manager, WRMA Kitui), Benard Limo (Principal Geologist, Kitui County), Simon Weru (NEMA, Kitui), Paul K. Chaga (NEMA, Kitui), Angeline Mumo (Assistant Chief, Kanziku), Dasmas Kiita (Assistant Chief, Zombe), Benard Musili (Assistant Chief, Mui Basin), Paul K. Mwaniki (Senior Chief, Lundi-Mui), Kilonzo Kiema (Ward Administrator, Mui Basin), Angeline Mbula (MCA, Kyuso), Eliud K. Mwangi (WRMA, Kitui), Isaac Mwanzia (Sub-County Administrator, Kitui South), and Phillip Ivuli (Chief, Kitui). We appreciate the time and information shared by various communities in Kwale County (especially Kuranze, Tiwi-Maweni, Denyenye, Msambweni, Mkangombe, Nguluku and Mrima Hills) and Kitui County (especially Ithuka, Kanziku, Zombe, Mui and Ngaaiye).

Many thanks to Tiffany Mwake and Sharon Mwende of Habitat Planners for their excellent support both in the field missions and the office work. Finally, Tabitha Mugo is appreciated for her excellent work in reviewing the draft report and pointing some very useful corrections.



NON-TECHNICAL EXECUTIVE SUMMARY

1. INTRODUCTION

The purpose of the policy SESA was to assess ways in which environmental administration and governance in the mining sector as recently amended through the Mining and Minerals Policy 2016, Mining Act 2016 and associated mining regulations is likely to affect the environment and social life including and human rights at both the national and community levels. The aim of the SESA was to identify opportunities for managing environmental and social risks and strengthening social accountability. The main report consists of nine sections which are structured according to the following subjects:

- 1. Introduction and background
- 2. Governance framework for mining sector, environment and human rights in the Kenya
- 3. Scope, approach and methodology for the SESA
- 4. PPP analysis and governance impact identification
- 5. Environmental impact assessment in the mining sector
- 6. Stakeholder engagement and governance impact analysis
- 7. Governance capacity analysis
- 8. Environmental management and monitoring plan
- 9. Conclusion and recommendations

2. BACKGROUND

Kenya is endowed with over one hundred and twenty different types of mineral resources in many of the within the 47 counties, but the exploitation of these assets is yet to reach peak level. Accordingly, the Government of Kenya has recognized the mining sector as a key player for Vision 2030 and the UN-SDGs, and has recently included oil, gas, and other minerals as the seventh priority sector with a high potential of spurring economic growth. Kenya has therefore seen a burst of mining investor interest in the past decade, due to the increased global demand for precious metals and minerals. With further exploration and development, it is estimated that Kenya will soon have the capacity to position itself as a regional mining sector hub for Eastern Africa. Like other sectors in Kenya, the mining sector is governed and managed through instruments which include policies, legal frameworks, regulations, and guidelines. The recent introduction of devolved governance in Kenya provides an opportunity for sustainable management of mineral resources because the national constitution has ensured that the interests and rights of local communities are considered within all the economic sectors.

However, although the government has recognized the key role played by the mining sector in driving the national economy, the implications of this role to environmental protection and human rights cannot be under estimated. It is therefore important to evaluate the current governance framework in the mining sector, as recently amended through the Mining and Minerals Policy 2016, Mining Act 2016 and associated mining regulations, in order to determine its effectiveness in ensuring harmony between mining activities and other national and county interests especially environmental protection and human rights.

3. THE POLICY SESA

The overall governance in the mining sector in Kenya is undertaken using a framework consisting of 18 instruments which include the Mining and Minerals Policy, 2016, Mining Act, 2016, and the Local Content Bill, 2016 whose implementation and enforcement is supported by the Mining (Local Equity Participation) Regulations, 2012. In 2016 and 2017, up to 14 additional mining regulations were formulated with the aim of strengthening the governance framework. In addition, the Guidelines for Work Programmes and Exploration Reports, 2017 were prepared for additional support to the governance framework. Accordingly, there is need to evaluate and assess the effectiveness of the current mining governance framework in readiness for the future growth in the sector. This evaluation included the institutional framework involving a wide range of institutions namely, Ministry of Mining, Directorate of Mines, Directorate of Mineral



Management and Regulations, Directorate of Geological Surveys, Directorate of Mineral Promotion and Value Addition, Directorate of Mine Health, Safety and Environment, Directorate of Resource Surveys and Remote Sensing, Directorate of Corporate Affairs, Geo-data Centre and Minerals Certification Laboratory, National Mining Corporation, Mineral Audit Agency, Mineral Rights Board, Ministry of Energy, Ministry of Environment and Natural Resources (MENR), National Environment Management Authority (NEMA), Directorate of Occupational Health and Safety Services, County Governments, The Kenya Chamber of Mines (KCM), Association of Artisanal and Small-Scale Miners (ASSM), National Land Commission and the Kenya Chamber of Mines

The United Nations Development Programme (UNDP) in collaboration the Swedish Environmental Protection Agency (SEPA) initiated a four-year programme funded by SIDA (Swedish International Development Corporation Agency) in an effort to integrate environmental and social concerns into the broad realm of sustainable policy making in the mining sector. The programme will provide targeted support to four countries, namely Colombia, Kenya, Mongolia, and Mozambique and is expected to strengthen environmental public administration, human rights and the rule of law. It is particularly aimed at strengthening gender, human rights and the rule of law in the mining sectors. The SESA for the mining sector governance framework in Kenya was funded and supported by this programme. It was undertaken within this initiative in a partnership with the Ministry of Environmental and Natural Resources (MENR), the National Environment Management Authority (NEMA) and the Ministry of Mining (MoM).

The SESA is a pro-active decision support instrument, acting as a 'critical friend' to those involved in policy, plan and programme (PPP) formulation and implementation. It aims at making strategic decisions above the project level more transparent, accountable and ultimately more environmentally sustainable. It is usually undertaken in order to assess the sustainability of development policies, plans and programmes from which a wide range of development projects usually emerge. In this context, it does not simply assess impacts of proposed action (i.e. of a proposed policy, plan or programme) in a reactive manner. Rather, it aims at steering thinking of those involved in policy, plan and programme making with regards to alternative actions for achieving overall economic, social, and other environmental aims. It investigates ways to avoid, reduce or otherwise mitigate negative impacts while enhancing positive outcomes. The SESA is defined as a systematic and comprehensive process for evaluating the environmental consequences of policies, plans or programmes (PPPs) and their alternatives.

The policy SESA for the mining sector in Kenya, as recently amended through the Mining and Minerals Policy 2016, Mining Act 2016 and associated mining regulations, was conducted with a focus on relevant policies, legal frameworks and regulations. The SESA also interrogated relevant strategic plans. The specific objectives for the SESA were to:-

- a) Determine whether the governance frameworks in the sector have effectively considered the national environmental obligations,
- b) Establish whether the governance frameworks in the sector have effectively considered the national obligations for protection of human rights, and
- c) Determine whether there is adequate and effective capacity for ensuring environmental sustainability and protection of human rights in the mining sector.

The SESA was expected to offer recommendations for:

- a) Improvements in the processes of environmental administration and governance in the mining sector so that the purpose and expectations of the various legislations are fully attained;
- b) Enhancements in the engagement of communities and wider society in environmental administration and governance in the mining sector, while incorporating the rule of law and human rights principles; and



c) Capacity building for both government and community stakeholders to allow the processes of environmental administration and governance in the mining sector to be conducted in accordance with best practices and with proper consideration of the underlying goals of the Constitution of Kenya and human rights principles.

4. APPROACH AND METHODOLOGY

The SESA was undertaken in accordance with the 2012 National Guidelines for SESA and the revised Environmental (Impact Assessment and Audit) Regulations 2003 in Kenya. The geographic scope considered the whole of Kenya but the stakeholder engagement concentrated on Nairobi which is the national seat for the governance of the mining sector in the country as well as Kwale and Kitui Counties as key mining areas in the country. Nairobi County was selected because it is the Capital City of Kenya, which hosts many national stakeholders (drawn from the public sector, private sector and civil society) in the mining sector, environment and human rights. The scope was also configured carefully in order to ensure full consideration of the requirements in the 2012 National Guidelines for SESA and the revised Environmental (Impact Assessment and Audit) Regulations 2003.

The policy SESA involved a vigorous PPP analysis to determine how the prescriptions in 18 instruments, as recently amended through the Mining and Minerals Policy 2016, Mining Act 2016 and associated mining regulations including the Mining (Local Equity Participation) Regulations, 2012 and thirteen additional mining regulations, have integrated the national obligations for environmental sustainability and protection of human rights. The environmental sustainability and human right benchmarks used in the policy SESA consisted of key obligations in a total of 93 instruments including 78 environmental and 15 human rights governance frameworks (25 policies, 33 legal frameworks, 10 regulations, 7 guidelines and standards, 7 national strategies and action plans, and 11 international agreements including MEAs). The PPP analysis involved a comprehensive evaluation of the mining sector governance prescriptions frameworks to determine the level of integration for the environmental and human right obligations in the 93 frameworks. The PPP analysis was based on the following three integration classes:- a) full integration or where 80-100% of the obligations were considered, b) moderate integration where upto 30-79% of the obligations were considered.

In addition to the PPP analysis, an evaluation of mining project Environmental Impact Assessments (EIAs) was also undertaken using the existing records in the NEMA to determine the effectiveness of the process in safeguarding the environment, and also providing a platform for stakeholder consultation and involvement in mining decision making. The evaluation was undertaken according to the guidelines in the quality Guidebook for Evaluating Mining Project EIAs by the Environmental Law Alliance Worldwide. The evaluation considered a 10-year period, between 2006 and2016, and used a sample of 50 mining project EIA reports. The specific objectives for the evaluation were to:- a) determine the type of mining projects for which EIA licenses had been applied for including the location of mining activities and proponents, b) assess the qualifications, relevance and competence of the EIA experts, c) assess the quality of EIA implementation protocol and final reports in terms of adherence to relevant regulations and guidelines including comprehensive stakeholder consultation and involvement, d) evaluate the capacity and quality of administrative review of mining project EIA reports by NEMA, and e) assess the quality of post mining project EIA report approval follow-up and compliance monitoring including post-EIA environmental audits.

The stakeholder engagement and consultation process was preceded by comprehensive stakeholder analysis and mapping in order to determine the key stakeholders to be considered in the SESA process. Stakeholder engagement and consultations were undertaken in Nairobi, Kwale and Kitui Counties. Both Kwale and Kitui counties were study cases of mining sites in rural areas while Nairobi was selected as a case that represented all stakeholders in the mining sector at the national level. Stakeholder consultations involved key informant consultations, focus group discussions, dialogue meetings and workshops. The



consultations mainly targeted communities where mining is taking place and where minerals are known to exist but actual mining has not taken place. The consultations were aimed at providing a platform to identify strengths and weaknesses in the mining sector governance frameworks in relation to environmental sustainability and protection of human rights based on stakeholders at the grassroots. The consultations also provided a platform to discuss the level of public involvement in mining project EIAs, including issue of post-EIA monitoring and follow-ups. In Kwale County, such meetings were held in Nguluku, Mrima, Mkangombe, Denyenye, Tiwi-Maweni and Kuranze. In Kitui County consultative meetings were held in Ikutha, Kanziku, Zombe, Mui, and Ngaaiye. Three scoping consultation meetings were undertaken with one each in Kwale, Kitui and Nairobi with a total of 161 stakeholders were consulted (66 in Kwale, 48 in Kitui and 47 in Nairobi). In addition, three consultation workshops were held in Kwale and Kitui with the aim of sharing the draft SESA report with the stakeholders in accordance with the National Guidelines for Strategic Environmental and Social Assessment in Kenya. The SESA process was finalized in a national validation and adoption workshop in Nairobi.

5. FINDINGS

5.1: PPP Analysis

5.1.1: Environment

The integration of obligations in 78 environmental frameworks in the 18 governance frameworks for the mining sector indicated that majority of the obligations in national policies were either well and fully, or moderately integrated with only 4 out of 22 policies (19%) not integrated. The non-integrated policies included; the National Water Policy (2012 Draft), National Wildlife Conservation and Management Policy, 2012, National Policy for Disaster Management, 2009 and the National HIV and Aids Policy, 2009. The pattern was similar for the legal frameworks with only 4 out of 25 legal frameworks considered as not integrated, namely; the HIV and AIDS Prevention and Control Act No. 14 of 2006, Radiation Protection Act CAP 243 (Revision 2012), National Cohesion and Integration Act 2011 (Amendment 2012) and the County Governments Disaster Management Bill, 2014. The key national strategy which was poorly integrated is the National Climate Change Response Strategy (NCCRS, 2010) including the National Climate Change Action Plan 2013-2017. This is compounded by lack of integration of the United Nations Framework Convention on Climate Change (UNFCCC) and the United Nations Convention to Combat Desertification (UNCCD).

The PPP analysis also showed that most of the current environmental regulations in Kenya are well considered in the governance framework for the mining sector except for the Radiation Protection (Standards) Regulations, 1986 (Legal Notice 54/1986) and the Radiation Protection (Safety) Regulations, 2010. This might create a risk in radiation related mining activities such as the on-going titanium mining in Kwale County. The same problem is associated with the proposed niobium mining in Mrima Hill in the same county. Overall, the governance framework for the mining sector governance has adequately integrated most environmental obligations. Only 13 out of 78 environmental sustainability instruments equivalent to 16.7% have not been integrated, namely; 6 environmental policies, 6 legal frameworks, 2 environmental regulations, 1 environmental guideline, 1 national strategy and 2 MEAs.

The PPP analysis identified the following potential negative environmental impacts due to the environmental obligations which are not fully integrated in the mining sector governance framework:-

- a) Overuse of natural resources especially water resources
- b) Mining related disasters Explosions, fires, shaft collapses and cave-ins, mine suffocation, mine flooding and so on
- c) Risk of climate change disasters such as floods, landslides and disease epidemics
- d) Deforestation by mining activities
- e) Loss and degradation of critical ecosystems and loss of species



- f) Wetland loss and degradation
- g) Introduction of alien invasive species
- h) Contamination of streams, rivers, lakes, wetlands and groundwater resources
- i) Deterioration of water quality
- j) Risk of mining related conflicts
- k) Public safety and health problems
- I) Risk of radiation exposure
- m) Increased spread of HIV/AIDS
- n) Weak CSR implementation
- o) Weak mitigation and adaptation for climate change in mining areas

5.1.2: Human Rights

The PPP analysis on the integration of obligations in 12 human right frameworks in the mining sector, as recently amended through the Mining and Minerals Policy 2016, Mining Act 2016 and associated mining regulations, identified the following potential risks of human rights violation due to the human rights obligations which are not fully integrated in the mining sector.

- a) Consumer rights
- b) Right to fair administrative action
- c) Right to access of public information
- d) Right to security and peace
- e) Right to proper physical and mental health
- f) Child labour

5.2: Mining EIAs

The quality of mining project EIAs in Kenya was evaluated according to the guidelines in the quality guidebook for evaluating mining project EIAs by the Environmental Law Alliance Worldwide (Environmental Law Alliance Worldwide 2010). The findings showed that the 2006-2016 reports were only excellent with regard to prediction of potential physical impacts and baseline environmental assessment. They were satisfactory with regard to the consideration of key EIA stages, prediction of potential social impacts, consideration of potential impacts across all mining stages, analysis of alternative options, impact mitigation, and environmental management and monitoring plan (EMP). The findings showed that the quality of reports was weak in terms of comprehensive consideration of all the phases of mining projects, adequacy of environmental regulatory framework, consideration of potential biological impacts, human rights considerations and EIA consultation meetings. The quality was very weak in terms of the overall quality of stakeholder engagement and consultations, mining related climate change considerations, consideration of transboundary impacts and cost benefit analysis (CBA). The evaluation established that only a mere 7% (3 out of 50) of the approved mining projects in the 2006-2016 period had undertaken third party post-EIA follow-up environmental audits.

The evaluation identified the following challenges with regard to the manner in which NEMA reviewed mining project EIA reports and subsequent EMP compliance monitoring:-

- a) Inadequate capacity and technical expertise for administrative review of EIA reports, and subsequent compliance monitoring follow-ups
- b) Lack of response for relevant lead agencies on the administrative review of EIA reports
- c) Political interest and interference in some mining projects
- d) Breach of license conditions breach of license conditions

5.3: Institutional Capacity Analysis

A wide range of institutions are involved in the interface between, mining activities, environment and human rights. An evaluation of the capacity status at the National Environment Management Authority (NEMA)



and the Directorate of Occupational Safety and Health Services (DOSHS) showed that significant efforts have been made to ensure harmony in the interface. The institutional capacity analysis showed adequate systemic capacity especially in terms of; a) grievance resolution for mining EIAs and issuance of an EIA licenses, However, there is a cross-cutting challenge in terms of institutional and personnel capacity especially in terms of; a) inadequate finacial resources and essential instruments like vehicles and ICT, b) inadequate staff for timely inspection of mining project sites including the compliance monitoring of recommended EMP in mining EIAs.

5.4: Stakeholder Consultations

The governance gap issues raised by the stakeholders and not identified in the PPP analysis were:- a) widespread control of the mining sector by local and international cartels, b) inadequate capacity for mining governance agencies, c) lack of proper coordination for agencies involved in mining sector governance, d) lack of a national framework for compensation and resettlement of displaced communities, d) inadequate participation of county governments in the mining sector governance, e) ineffective Mining Liaison Committees, f) non-decommissioning of mines, and g) lack of proper mine inspection mechanisms. The difference could be attributed to a number of reasons, namely; a) poor administration of governance frameworks in the sector including implementation of policy, poor enforcement of laws, regulations and guidelines, and, b) almost all the governance instruments in the mining sector as evaluated in the PPP analysis are all new with the policy and legal framework having been introduced through the Mining and Minerals Policy 2016 and Mining Act 2016. The implication of this is that the full impact of the restructured governance framework in the mining sector is yet to be realized. Most of the stakeholder views were largely based on the previous frameworks including the Mining Act 1940 which enacted during the colonial times.

The following mining governance gap issues were identified in both the PPP analysis and stakeholder analysis which indicates the need to urgently address them:- a) risk of mining related conflicts, b) risk of public safety and health problems, c) risk of radiation exposure, d) likely spread of HIV/AIDS, and, e) inadequate CSR interventions.

6. CONCLUSION AND RECOMMENDATIONS

6.1: Conclusion

The governance framework for the mining sector, as recently amended through the Mining and Minerals Policy 2016, Mining Act 2016 and associated mining regulations, is well configured in terms of environmental sustainability and human rights. However, the PPP analysis in the policy SESA identified the potential negative impacts as highlighted **Part 5.1.1** above, which are likely to emerge based on the current configuration of the governance framework. The PPP analysis showed that the integration of the obligations in 12 human right frameworks including the Constitution of Kenya especially Chapter 4 on the Bill of Rights, the Universal Declaration of Human Rights, ILO Declaration on Fundamental Principles and Rights at Work and African Charter of Human Rights is weak with regard to the protection of a number of human rights such as right to fair administrative action, right of equal access to public service, right to access of public information, right to public health and safety and the right of no child abuse including child labour.



6.2: Recommendations

6.2.1: Strengthening of the Mining Sector Governance Framework

The following recommendations are made on the basis of the PPP analysis findings in order to strengthen the mining sector governance framework, as recently amended, in order to deal with potential negative environmental and human right impacts:-

- a) Review of mining regulations
- b) Developing additional mining regulations
- c) Developing mining guidelines

6.2.1.1: Review of mining regulations

Review of the Mining Act No. 2 of 2016 and related regulations to address sector governance weaknesses with regard to potential risk of water pollution, wildlife conservation impacts, mining related conflicts and weak integration of climate change mitigation and adaptation as follows:-

Mining sector		Recommendation
	Wildlife conservation impacts Mineral related conflict Integration of climate change mitigation and adaptation	Ammendment of:- a) s176 of the Mining Act No. 2 of 2016 on environmental laws, b) s13 of (License & Permit) Regulations, 2016 (LN No. 87) on the requirements of the Environmental Management and Coordination Act and any regulations or guidelines made thereunder before any mineral right, and c) s8 of the Mining (Community Development Agreement) Regulations, 2017 (LN No. 148) under:- 8. (1) (h) protection of the environment and natural resources; (i) support for cultural heritage and sports; and (j) protection of ecological systems - to introduce requirements for:- i. Provision of cosystem and Species Conservation Strategy (ESCS) in the EIA mitigations ii. Provision of Grievance Redress Mechanism (GRM) in the EIA mitigation strategies iii. Appropriate climate change mitigations in the EIA mitigation strategies
d) Water pollution		Ammendment of s177 of the Mining Act No. 2 of 2016 on water rights to introduce a requrement for annual water quality monitoring reporting in mining areas in partnership with the local WRUAs
e)	Mining disaster surveillance and emergency response	Ammendment of:- a) Mining (Community Development Agreement) Regulations, 2017 (LN No. 148) under s2, and b) Mining (License & Permit) Regulations, 2016 (LN No. 87) under s178 on occupational health and safety to introduce requirements for Mining Disaster Surveillance and Emergency Response Plan

6.2.1.2: Developing additional mining regulations

The following additional mining regulations should be developed in order to strengthen the governance framework by integrating the missing environment and human right obligations.



Mining sector goverance weakness		Recommended Governance Intervention
1	. Environmental pollution and degradation in mining areas	Environmental Rehabilitation and Restoration Regulations for Decommissioned Quarries and Mines - in collaboration with NEMA in accordance with S180 of the Mining Act No.2 of 2016 on Requirement of site restoration and mine-closure plans
2	. Risk of radiation exposure	Mining Radiation Safety Regulations and Guidelines – in collaboration with the radiation protection Board (RPB)
3	 Public disclosure of royalties paid by mining companies 	Mining (Proactive Public Disclosure and Access to Information) Regulations

6.2.1.3: Developing additional mining guidelines

The following additional mining guidelines should be developed in order to strengthen the governance framework by integrating the missing environment and human right obligations.

Mining sector goverance weakness		Recommended Governance Intervention
1.	Unsustainable mining and over- consumption of water resources	Guidelines for Rainwater Harvesting and Conservation in Mining Areas
2.	Introduction of alien invasive species in mining areas	Guidelines for Prevention of Alien Invasive Species in Mining Areas in collaboration with NEMA

6.2.2: Institutional capacity recommendations

Given the important oversight role played by these instituiions in the mining sector especially in regards to protection of the environment and human rights, its important to enhance their goverance capacity and make them more effective in their mandates. This needs to be done by; i) allocating adequate finacial resources and essential facilities like vehicles and ICT, ii) training and exposure of DOSHS technical staff on OSH issues associated with the mining sector, iii) employing adequate skilled staff and create suitable incentives for retainace purposes, and, iv) strengthening NEMA's emergency response unit.

6.2.3: Stakeholder recommendations

Most of the stakeholder recommendations were in agreement with those from the PPP analysis. However, the following unique recommendations were advanced by the stakeholders on various mining issues in the country.

a) Management of mineral resources

- Develop guidelines for valuation of with minerals.
- Re-classify mineral in schedule of the Mining Act 2016 into those to be administered by the national and county governments and gazette the classifications.
- Specify the functions of county governments in managing minerals under their administration
- Develop regulations to create mining institutional structures at county level.
- Support the County Environmental Committees (CECs) to incorporate a cross-sectoral integration sub-committee including mining sector.
- Establish county leadership forum to develop a common approach for governance in mining sector.

b) Environmental pollution and degradation

- Strengthen the capacity of government lead agencies to undertake more effective mining inspections.
- Develop additional regulations and guidelines for the governance of artisanal mining.



c) Social Environment

- Develop Occupational Safety and Health Regulations and guidelines for the mining sector.
- Develop guidelines on the formation and operationalization of the Liaison Committees and incorporate host communities in those committees.
- Empower local communities to effectively participate in the mining sector.
- Establish and gazette compensation and resettlement regulations at the local level as provided under Article 153(8) of the Mining Act 2016.
- Strengthen the capacities of mining governance implementing agencies.

d) Human Rights

- Review the Mining (Community Development Agreement) Regulations, 2017 to adequately consider the Bill of Rights in the Constitution of Kenya
- Review the Mining (Community Development Agreement) Regulations, 2017 to adequately consider the African Charter of Human and People's Rights

6.2.4: Mining EIAs

The following are recommended with regard to the implementation of mining project EIAs:-

EIA component	Recommendation
Approval of ToRs	The NEMA should tighten the rules considered in the approval of ToRs for mining project
for mining project	EIAs to ensure the following:-
EIAs	a) The inclusion of a mining engineer or geologist in the EIA team,
	b) Comprehensive consideration of all the phases of mining projects,
	c) Adequacy of the environmental regulatory framework for the EIAs,
	d) Adequate consideration of potential biological impacts,
	e) Adequate consideration of human right issues and related climate change
	f) Convincing stakeholder engagement plans especially with regard to the number and
	locations for consultation meetings,
	g) Adequate strategies for cost benefit analysis



TABLE OF CONTENTS

SESA IMPLEMENTATION TEAM	ii
LIST OF ABBREVIATIONS	iv
ACKNOWLEDGEMENTS	
NON-TECHNICAL EXECUTIVE SUMMARY	vii
TABLE OF CONTENTS	vii
LIST OF FIGURES	xviii
LIST OF TABLES	xviii
LIST OF PLATES	xix
1. INTRODUCTION AND BACKGROUND	
1.1: The Mining Sector in Kenya – Baseline situation and future scenarios	
1.2: Mining Sector and Sustainable Development Goals (SDGs)	
1.3: Current Status of the Mining Sector in Kenya	
1.4: Sustainable Management in the Mining Sector	
1.5: Strategic Environmental and Social Assessment (SESA) for the Mining Sector in Kenya	24
2. GOVERNANCE FRAMEWORKS FOR MINING SECTOR, ENVIRONMENT AND HUMAN R	
IN THE KENYA	
2.2: Governance Framework in Environment	
2.3: Governance Framework in Human Rights	56
3. SCOPE, APPROACH AND METHODOLOGY	62
3.1: Terms of Reference for the Strategic Environmental and Social Assessment	
3.2: Overall Scope and Road Map	
3.3: PPP Frameworks	
3.4: PPP Analysis	
3.5: Strategic Evaluation of Environmental Impact Assessments (EIAs) for the Mining Sector	
3.6: Stakeholder Engagement and Consultations	
3.5: SESA Indicators and Targets for Policy Impact Analysis (PIA)	82
3.6: Analysis of Alternative PPP Options	85
4. PPP ANALYSIS AND GOVERNANCE IMPACT IDENTIFICATION	
4.1: Overview	
4.2: Integration Status for Environmental Obligations in the Mining Sector	
4.3: Human Rights Obligations and Integration Status in Mining Sector	95
5. ENVIRONMENTAL IMPACT ASSESSMENT IN THE MINING SECTOR	100
5.1: Mining EIAs in Kenya	
5.2: Quality of EIA Experts	
5.3: Quality of Mining EIA Reports	
5.4: NEMA Database of EIA Reports	
5.5: EIA Report Review and Compliance Follow-Ups	
5.6: Post EIA Environmental Audits	
5101 1 OCC ED CENTROLLING AGRICULTURA	107
6. STAKEHOLDER ENGAGEMENT AND GOVERNANCE IMPACT ANALYSIS	108
6.1: Findings in Kwale County	
6.2: Findings in Kitui County	
6.3: Findings in Nairobi	



6.4: Summary of Stakeholder Consultation Findings	118
7. GOVERNANCE CAPACITY ANALYSIS	120
7.1: National Environment Management Authority (NEMA)	
7.2: Directorate of Occupational Safety and Health Services (DOSHS)	126
8. ENVIRONMENTAL MANAGEMENT AND MONITORING PLAN	130
8.1: Environmnetal Scenario Analysis	130
8.2: Management and Monitoring Action	133
8.3: Environmental Management and Monitoring Standards and Guidelines	137
8.4: Roles and Responsibilities	
8.5: EMMP Schedule	137
9. CONCLUSION AND RECOMMENDATIONS	148
9.1: Conclusion	
9.2: Recommendations	150
DEFEDENCES	154

LIST OF FIGURES

Figure 1- 1: Geological map of Kenya (Source: Republic of Kenya, 2015)	3
Figure 1- 2: Mineral categories and their key uses (Source: UNCTAD, 2007)	
Figure 1- 3: Mineral occurrences in Kenya-1 (Source: Ministry of Mining, 2015)	
Figure 1- 4: Mineral occurrence in Kenya-2 (Source: Ministry of Mining, 2015)	
Figure 1- 5: Overall distribution of mineral deposits in Kenya (National Spatial Plan 2015-2045)	
Figure 1- 6: Overall mineral production value (Ksh) for Kenya's mining sector (2003-2013)	
Figure 1- 7: Potential human rights impacts in the mining sector	
Figure 1- 8: Reported human rights violations in Kenya (2008-2012) Source: KNCHR, 2013)	
Figure 1- 9: The linkages between SESA, EIA and environmental audits	
· · · · · · · · · · · · · · · · · · ·	
Figure 3- 1: Map of Kwale County	64
Figure 3- 2: Map of Kitui County	
Figure 3- 3: General activity flowchart for the SESA process	67
Figure 3- 4: Stakeholder mapping criteria	
LIST OF TABLES	
Table 1- 1: Mineral categories and their characteristics	4
Table 1- 2: Mineral types in Kenya by county	
Table 1- 3: Distribution of iron ore deposits in Kenya	
Table 1- 4: Linkages between the mining sector and the SDGs	
Table 1- 5: Quantity and value (Ksh) of the mineral production in Kenya (2005 to 2009)	
Table 1- 6: Quantity and value (Ksh) of the mineral export in Kenya (2005 to 2009)	
Table 1- 7: Human rights in the Constitution of Kenya	
3	
Table 2- 1: Governance framework for the mining sector in Kenya	27
Table 2- 2: Environmental and human rights prescriptions in the mining policy	
Table 2- 3: Summary of the environmental obligations considered in the Mining and Minerals Policy	
Table 2- 4: Environmental and human rights prescriptions in the mining law	
Table 2- 5: Summary of the environmental obligations considered in the Mining Act (2016) and	
Content Bill	
Table 2- 6: Environmental and human rights prescriptions in the mining regulations	
Table 2- 7: Summary of the environmental and human rights obligations in various management regu	
in the mining sector	
Table 2- 8: Environmental and human rights prescriptions in the mining guidelines	
Table 2- 9: Integration of the Africa Mining Vision (AMV) in Kenya	
Table 2- 10: Environmental legal frameworks in Kenya	50
Table 2- 11: Environmental regulations in Kenya	52
Table 2- 12: Environmental strategies and action plans in Kenya	
, ,	
Table 3- 1: Stakeholder clusters	74
Table 3- 2: Prioritized stakeholders	
Table 3- 3: Summary of the SESA stakeholder engagement activities in Kwale County	
Table 3- 4: Summary of the SESA stakeholder engagement activities in Kitui County	
Table 3- 5: Summary of the SESA stakeholder engagement activities in Nairobi	
Table 3- 6: Key engagement strategy and tools used during the SESA consultations	
, 5 5,	
Table 4- 1: Environmental PPP analysis summary table	ନ୍ତ
Table 1 It Entironmental FFF analysis sammary table minimum mi	



Table 4- 2: Summary of well integrated environmental obligations in the mining sector	89
Table 4- 3: Summary of environmental obligation integration gaps	93
Table 4- 4: Human rights PPP analysis summary table	
Table 4- 5: Summary of well integrated human right obligations in the mining sector	97
Table 4- 6: Summary of human rights integration gaps	
Service of the servic	
Table 5- 1: Types of minerals in the 2006-2016 mining project EIAs	101
Table 5- 2: Geographic distribution of mining project EIAs	101
Table 5- 3: Team composition for the mining project EIAs in 2006-2016	102
Table 5- 4: Summary of findings on the quality of mining project EIA reports	
Table 5- 5: Strengths and weaknesses in the administrative review of EIA reports	
·	
Table 6- 1: Summary of stakeholder mining governance concerns in Kwale County	108
Table 6- 2: Summary of stakeholder mining governance concerns in Kitui County	112
Table 6- 3: Summary of stakeholder mining governance concerns in Nairobi	116
, and the second	
Table 8 - 1: Environmental Management and Monitoring Plan for the Mining Sector in Kenya	138
LIST OF PLATES	
Plate 1- 1: The crude nature of artisanal mining in Kenya	17
Plate 1- 2: Quarrying sites in the Kitengela Wildlife Dispersal Area	
Plate 1- 3: Vegetation clearance in an artisanal mining site in Kenya	
Plate 1- 4: A pile of waste rocks generated by quarrying activities in the Kitengela Wildlife Dispe	
Plate 5- 1: Database of active EIA documents in the EIA section at NEMA headquarters	103
Plate 5- 2: The catalogued active database of EIA documents at NEMA headquarters in Nairobi	
Plate 5- 3: The container storing archival EIA documents within the NEMA compound	
Plate 5- 4: Uncatalogued database of archival EIA documents in a container	
5	
Plate 6- 1: Stakeholder consultations in Kwale County	110
Plate 6- 2: Stakeholder consultations in Kitui County	
Plate 6- 3: Stakeholder consultations in Nairobi	



1. INTRODUCTION AND BACKGROUND

1.1: The Mining Sector in Kenya – Baseline situation and future scenarios

The Government of Kenya has recognized the mining sector as a key player for achieving Vision 2030, and has recently included oil, gas, and other minerals as the seventh priority sector with a high potential of spurring economic growth (GoK, 2015a). In the past, both soda ash (or trona) and fluorspar have contributed significantly to the gross domestic product (GDP). Commercial trona (hydrated sodium bicarbonate carbonate) mining in Kenya has been undertaken in Lake Magadi within the South rift region for over 100 years since 1911. Lake Magadi is among the few places in the world where trona forms naturally, with one of the purest surface deposits, also as one of the few renewable mineral resources in the world. The mineral is used in manufacturing of glass, paper, detergents and textiles. In 2005, trona production in Lake Magadi was estimated at more than one million tonnes (GoK, 2015a). In 2012, Kenya contributed 2% of the world's soda ash production (Kostick, 2013; Miller, 2013). Mining of trona is an important part of the socio-economic fabric of the Lake Magadi region and source of employment for 450 people (GoK, 2005d; GoK, 2015a). Elsewhere, commercial fluorspar mining in Kerio Valley within the North rift was initiated in 1971, with a total of approximately 360,000 tonnes of ore being mined each year until the year 2016. The fluorspar production was estimated at 117,420 metric tonnes in 2012 compared to 110,000 metric tonnes in 2011. The mineral is used directly or indirectly to manufacture products such as aluminum, gasoline, insulating foams, refrigerants, steel, and uranium fuel. In 2012, Kenya contributed 5% of the world's fluorspar production (Kostick, 2013; Miller, 2013). Kenya is endowed with other types of minerals besides soda ash and fluorspar such as gold, limestone, gemstone, titanium, niobium, and coal among others.

Gold is mainly extracted by artisan workers in Western Kenya where mining has been undertaken for several decades (GoK, 2015a; NCI, 2015). However, modern commercial gold extraction is yet to be undertaken at a level where it can make a significant contribution to the nation's GDP like other natural resources. Recently, Kenya has also become an important source of coloured gemstones. In 2014, the country joined the league of exporters with the first shipment of 25,000 tonnes of ilmenite to China from the Kwale Mineral Sands Project operated by Base Titanium, the Kenyan subsidiary of the Australian Base Resources Company. It is estimated that 250,000 tonnes of Titanium ores will be exported annually from Kwale while a further 3.2 billion tonnes of the same mineral deposits are said to exist in the North coast.

Overall, the country earned more than \$232 million from the mining sector in 2015 which was an increase from \$203m in 2014. However, most of the country's mineral resources remain unexploited and the mining sector is still greatly underdeveloped (GoK, 2015a). The contribution of the mining sector to the GDP is still low at less than 1% (GoK, 2015a; NCI, 2015). In 2012, the mining sector had employed approximately 8,400 people which equally translated to less than 1% of Kenya's total labour force. With further exploration and development, it is estimated that Kenya could soon have the capacity to position itself as a regional mining sector hub for Eastern Africa. However, although the government has recognized the key role the mining sector plays in driving the national economy, policy issues have greatly undermined its development especially with regard to integration of environmental protection and human rights (Mutua, 2014; NCI, 2015).

In this context, it's important for Kenya to seriously consider policy and legal measures to enhance the socio-economic contribution of the mining sector while at the same time enhancing the levels of environmental protection, in order to support the country's pursuit of sustainable development. Indeed, going by Article 10 of the Constitution, it is a mandatory to take into account sustainable development as a key consideration in the formulation and implementation of policy and legal frameworks. At the same time, Kenya is a part of the United Nations Global Compact, a voluntary initiative which aims at aligning strategies and operations with universal principles on human rights, labour, environment and anti-



corruption, and take actions that advance societal goals especially within the 2030 Agenda for Sustainable Development Goals agreed upon in 2015. The year, 2030, is the same target period for Vision 2030, the current national development strategy in Kenya. One of the key targets in the Second Medium Term Plan (MTP-2) for Vision 2030 for the 2013-2017 period was the development of a national mining policy, and the supporting legal, regulatory and institutional frameworks in order to support growth in the mining industry through increased investment and maximization of benefits from the exploitation of Kenya's mineral resources. In line with the MTP-2 goals, Kenya now has in place the Minerals and Mining Policy (2016) and Mining Act (2016) whose implementation and enforcement is supported by about 14 regulations through several institutions. The new instruments are subjectable to Strategic Environmental and Social Assessment (SESA) as stipulated in Section 41(1) of EMCA Cap 387. The aim of this is to enable relevant stakeholders to provide recommendations for corrective actions that will further enhance the country's ability to integrate sustainable development into the mining sector as required by article 10 of the Constitution.

1.1.1: Mineral Occurrence and Mining Potential in Kenya

Kenya has a complex and diverse geology as shown in **Figure 1-1**. The country is usually classified into five major geological blocks with varying potential for mining development, namely; i) Mozambique belt and Bukoban zone, ii) Sedimentary Palaeozic/Mesozoic zone, iii) Tertiary/Quaternary volcanics, iv) Archean/Nyanzian and Kavirondian belt, and, v) Sedimentary/Quaternary zone. The five geological belts are endowed with a variety of proven and undiscovered minerals which include; gold, gemstones (mainly ruby and several varieties of garnets), gypsum, silver, lead, manganese, zinc, copper, nickel, titanium and rare earth elements such as niobium (UNDP, 2014; GoK, 2015a).

The geological environment and mineralization zones in Kenya for can be summarized into the following key landscapes:-

- a) Proterozoic Mozambique belt and Bukoban zone: It is most extensive in Central Kenya, and is associated with minerals such as; kyanite, orundum, graphite, wollastonite, marble, asbestos, magnesite, kaolin, and a variety of gemstones all of which are associated with basic and granitic rocks.
- b) **Sedimentary Palaeozic/Mesozoic zone**: This zone is common in the south-eastern regions of Kenya which is a source of limestone, gypsum, clays, manganese and possibly hydrocarbons. Base metal mineralization, lead-zinc-barite and copper are also known to occur in the sedimentary basin along the coastal belt. Heavy mineral sands also occur along the coastal beach sands such as the approximate 3.2 billion tonnes of titanium in Kwale County. Explorations around the Mrima Hill in Kwale County have also confirmed upto 105 million tonnes of inferred mineral resource in the area including an average grade of 0.65% niobium pentoxide (Nb₂O₅) and upto 12 million tonnes of high grade (HG) niobium at 1.21% Nb₂O₅. This ore has also been found to contain large deposits of rutile, ilmenite and zircon that contain titanium. The estimated area underlain by HG niobium ore at a cut-off grade of 0.9% nitrogen (N₂) is estimated at 61ha with up to 12.6million tonnes of weathered ore. The estimated life of mine (LOM) for these deposits is about twenty (20) years (Habitat Planners, 2013).
- c) **Tertiary/Quaternary volcanics**: These are associated with the Rift Valley system which are known to have a variety of minerals such as; trona (soda ash), diatomite, fluorspar, natural Carbon dioxide, kunkar, gypsum and gemstones including quality rubies.
- d) **Archean/Nyanzian and Kavirondian belt**: This belt is located in Western Kenya around Lake Victoria, and is associated with a wide range of precious metals including gold, copper and silver. The zone is also associated with a potential for ferrous and no-ferrous metals and carbonatites.
- e) **Sedimentary/Quaternary zone**: It is widely distributed in the country with extensive deposits in the eastern region (east of the Rift Valley) with limited exposures to the northwest. Base metal mineralization, lead-zinc-barite and copper are known to occur in the sedimentary basin.



Overall, Kenya is endowed with over 129 different types of minerals. The mineral resources can be categorized into three main groups, namely; metallic minerals, non-metallic minerals and energy minerals. Each category is associated with various uses as highlighted in **Table 1-1**. **Figure 1-2** shows the three mineral categories and their main uses. The mineral resources in Kenya can be classified further into seven utility categories that include; i) 53 types of construction and industrial minerals, ii) 5 types of precious stones, iii) 8 types of precious metals, iv) 22 types of semi-precious stones, v) 35 types of base and rare metals, vi) 3 types of gaseous minerals, and, vii) 3 types of fuel minerals (UNDP, 2014). The occurrence and distribution of these minerals is widespread across the entire country as shown in **Figure 1-3, 1-4 & 1-5**.

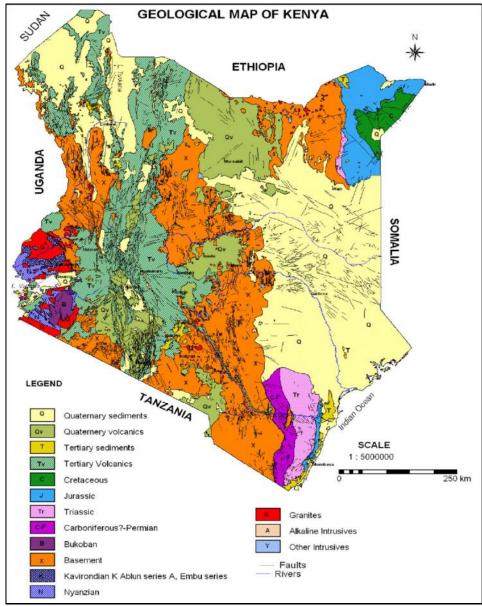


Figure 1- 1: Geological map of Kenya (Source: Republic of Kenya, 2015)

Table 1- 1: Mineral categories and their characteristics

Mineral category	Sub- category	Characteristics and uses
Metallic minerals	Ferrous metals	Minerals classified under this category include; iron ore, niobium, tantalum and titanium. They are used in the aerospace industry, construction, electronic engineering, manufacturing as well as steel manufacturing
	Precious metals	These include gold, silver and platinum which are used for the manufacture of jewelry, minting currency as well as for industrial purposes
	Base metals	These include bauxite, aluminum, cobalt copper, lead, magnesium, molybdenum, nickel and zinc which are mainly used in construction, electrical and electronic engineering as well as in a wide range of manufacturing operations
Non-Metallic minerals	Construction materials	Minerals under this category comprise of bricks, building stones, cement, clay, crushed rock, aggregate, gypsum, sand, gravel and slate
	Industrial minerals	These comprise of bentonite, industrial carbonates, kaolin, magnesia, potash, salt, sand, silica and sulphur. They are mainly used for the making of ceramics, chemicals, foundry casting, fillers, pigments, fuel, gas, iron, steel, and metallurgy
	Precious stones	These include diamonds and gems which are mostly used for the manufacture of jewelry and for industrial purposes. Precious metals also include the rare earth metals which comprises chemical elements found in the earth's crust that are vital to many modern technologies including; consumer electronics, computers and ICT infrastructure, transportation, health care and defense equipment
Energy minerals		These minerals include coal, oil and gas and are generally used to produce electricity as well as a number of other uses such as the manufacture of organic chemicals and plastics.

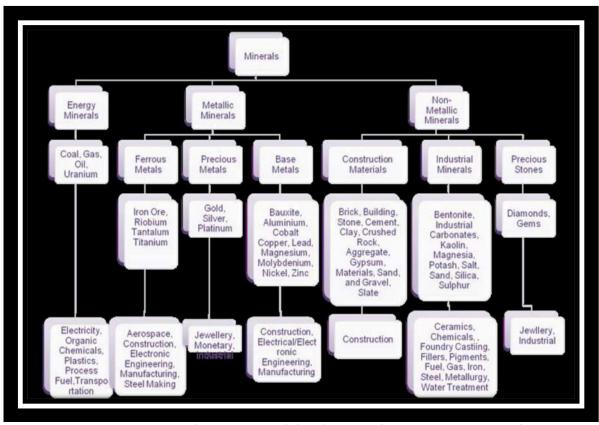


Figure 1- 2: Mineral categories and their key uses (Source: UNCTAD, 2007)



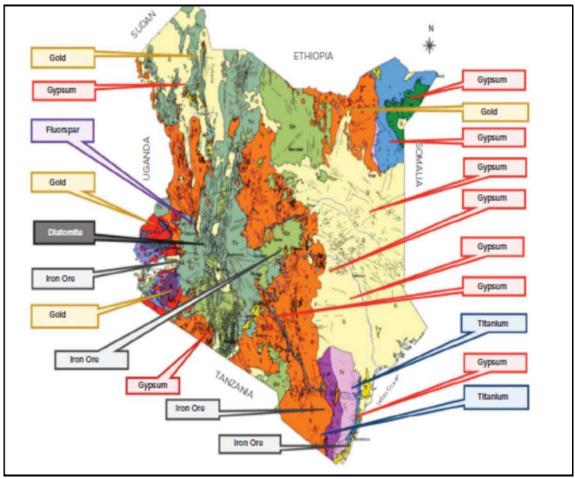


Figure 1- 3: Mineral occurrences in Kenya-1 (Source: Ministry of Mining, 2015)

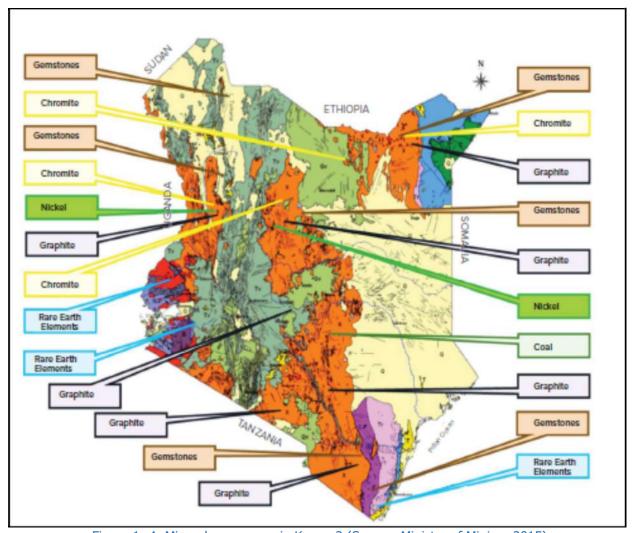
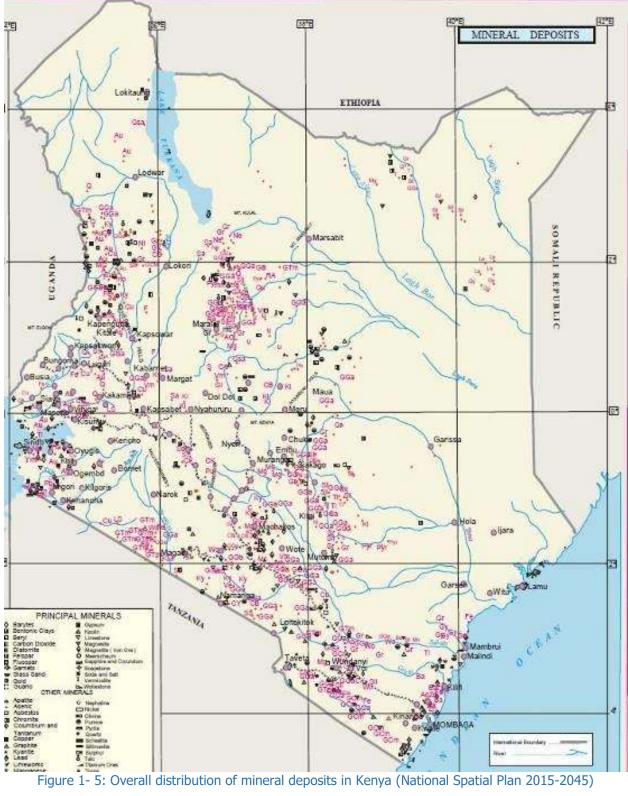


Figure 1- 4: Mineral occurrence in Kenya-2 (Source: Ministry of Mining, 2015)



The distribution of the 129 different types of minerals in Kenya indicates that 28 of the 47 counties in the country are endowed with mineral resources as shown in **Table 1-2** (GoK, 2015a). The distribution shows that gemstones are the most prevalent with occurrence in 14 or 50% of the 28 counties followed by gold which is found in 10 counties (36%) while gypsum is the third most common, with an occurrence in 7 or 25% of the 28 counties. Iron ore, which is a highly valued mineral worldwide due to its use in manufacturing iron and steel has also been documented in 8 areas including; Kakamega in the western zone of the country, Taita Taveta County, Ikutha area in Kitui County and Mrima Hills in Kwale County as shown in **Table 1-3** (GoK, 2005d).

Table 1- 2: Mineral types in Kenya by county

1. Kwale Gemstones, heavy mineral sands (Titanium related minerals), Silica sand, Niobium and Rare Earth Elements Titanium related minerals, Manganese, Barytes, Gypsum and Gemstones 3. Taita Taveta Iron ore, Gemstones, Manganese and Granites 4. Tana River Gypsum 5. Makueni Vermiculite and Gemstones 6. Kitui Coal, Iron ore, Copper, Gemstones, Limestone, Magnetite, alumina clay and marble 7. Machakos Gypsum and Pozzolana 8. Kiambu Carbon dioxide and Diatomite 9. Tharaka Nithi Iron ore, Gemstones and copper 10. Isiolo Gemstones 11. Garissa Gypsum 12. Mandera Gypsum 13. Isiolo Gemstones 14. Marsabit Gold, Manganese, Chromite and Gemstones 15. Elgeyo Marakwet Fluorspar 16. Baringo Gemstones (Baringo Ruby) and Diatomite 17. Nakuru Diatomite and potential fluorite deposits 18. Kajiado Soda ash, Feldspar, Limestone, Gypsum, Gemstones, Marble and Granite (dimension stones) 19. Uasin Gishu Carbon dioxide gas 20. Turkana Gypsum, Oil, Gold and Gemstones 21. West Pokot Gold, Gemstones and Chromite 22. Samburu Gold, Manganese, Chromite, Gemstone and vermiculite 23. Narok (Transmara) 24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Copper 28. Homa Bay Iron ore and Gold	Co	unty Minera	als
Gemstones 3. Taita Taveta Iron ore, Gemstones, Manganese and Granites 4. Tana River Gypsum 5. Makueni Vermiculite and Gemstones 6. Kitui Coal, Iron ore, Copper, Gemstones, Limestone, Magnetite, alumina clay and marble 7. Machakos Gypsum and Pozzolana 8. Kiambu Carbon dioxide and Diatomite 9. Tharaka Nithi Iron ore, Gemstones and copper 10. Isiolo Gemstones 11. Garissa Gypsum 12. Mandera Gypsum 13. Isiolo Gemstones 14. Marsabit Gold, Manganese, Chromite and Gemstones 15. Elgeyo Marakwet Fluorspar 16. Baringo Gemstones (Baringo Ruby) and Diatomite 17. Nakuru Diatomite and potential fluorite deposits 18. Kajiado Soda ash, Feldspar, Limestone, Gypsum, Gemstones, Marble and Granite (dimension stones) 19. Uasin Gishu Carbon dioxide gas 20. Turkana Gypsum, Oil, Gold and Gemstones 21. West Pokot Gold, Gemstones and Chromite 22. Samburu Gold, Manganese, Chromite, Gemstone and vermiculite 23. Narok (Transmara) 24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Copper	1.	Kwale	
 4. Tana River Gypsum 5. Makueni Vermiculite and Gemstones 6. Kitui Coal, Iron ore, Copper, Gemstones, Limestone, Magnetite, alumina clay and marble 7. Machakos Gypsum and Pozzolana 8. Kiambu Carbon dioxide and Diatomite 9. Tharaka Nithi Iron ore, Gemstones and copper 10. Isiolo Gemstones 11. Garissa Gypsum 12. Mandera Gypsum 13. Isiolo Gemstones 14. Marsabit Gold, Manganese, Chromite and Gemstones 15. Elgeyo Marakwet Fluorspar 16. Baringo Gemstones (Baringo Ruby) and Diatomite 17. Nakuru Diatomite and potential fluorite deposits 18. Kajiado Soda ash, Feldspar, Limestone, Gypsum, Gemstones, Marble and Granite (dimension stones) 19. Uasin Gishu Carbon dioxide gas 20. Turkana Gypsum, Oil, Gold and Gemstones 21. West Pokot Gold, Gemstones and Chromite 22. Samburu Gold, Manganese, Chromite, Gemstone and vermiculite 23. Narok (Transmara) Gold 24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Iron ore 27. Migori Gold and Copper 	2.	Kilifi	. •
 Makueni Vermiculite and Gemstones Kitui Coal, Iron ore, Copper, Gemstones, Limestone, Magnetite, alumina clay and marble Machakos Gypsum and Pozzolana Kiambu Carbon dioxide and Diatomite Tharaka Nithi Iron ore, Gemstones and copper Isiolo Gemstones Garissa Gypsum Mandera Gypsum Isiolo Gemstones Elgeyo Marakwet Fluorspar Baringo Gemstones (Baringo Ruby) and Diatomite Nakuru Diatomite and potential fluorite deposits Kajiado Granite (dimension stones) Uasin Gishu Carbon dioxide gas Turkana Gypsum, Oil, Gold and Gemstones West Pokot Gold, Manganese, Chromite, Gemstone and vermiculite Narok (Transmara) Gold Kakamega Gold and Dimension stone Kakamega Gold and Iron ore Migori Gold and Copper 	3.	Taita Taveta	Iron ore, Gemstones, Manganese and Granites
6. Kitui Coal, Iron ore, Copper, Gemstones, Limestone, Magnetite, alumina clay and marble 7. Machakos Gypsum and Pozzolana 8. Kiambu Carbon dioxide and Diatomite 9. Tharaka Nithi Iron ore, Gemstones and copper 10. Isiolo Gemstones 11. Garissa Gypsum 12. Mandera Gypsum 13. Isiolo Gemstones 14. Marsabit Gold, Manganese, Chromite and Gemstones 15. Elgeyo Marakwet Fluorspar 16. Baringo Gemstones (Baringo Ruby) and Diatomite 17. Nakuru Diatomite and potential fluorite deposits 18. Kajiado Soda ash, Feldspar, Limestone, Gypsum, Gemstones, Marble and Granite (dimension stones) 19. Uasin Gishu Carbon dioxide gas 20. Turkana Gypsum, Oil, Gold and Gemstones 21. West Pokot Gold, Gemstones and Chromite 22. Samburu Gold, Manganese, Chromite, Gemstone and vermiculite 23. Narok (Transmara) Gold 24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Iron ore 27. Migori Gold and Copper	4.	Tana River	* 1
alumina clay and marble 7. Machakos Gypsum and Pozzolana 8. Kiambu Carbon dioxide and Diatomite 9. Tharaka Nithi Iron ore, Gemstones and copper 10. Isiolo Gemstones 11. Garissa Gypsum 12. Mandera Gypsum 13. Isiolo Gemstones 14. Marsabit Gold, Manganese, Chromite and Gemstones 15. Elgeyo Marakwet Fluorspar 16. Baringo Gemstones (Baringo Ruby) and Diatomite 17. Nakuru Diatomite and potential fluorite deposits 18. Kajiado Soda ash, Feldspar, Limestone, Gypsum, Gemstones, Marble and Granite (dimension stones) 19. Uasin Gishu Carbon dioxide gas 20. Turkana Gypsum, Oil, Gold and Gemstones 21. West Pokot Gold, Gemstones and Chromite 22. Samburu Gold, Manganese, Chromite, Gemstone and vermiculite 23. Narok (Transmara) Gold 24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Iron ore 27. Migori Gold and Copper	5.	Makueni	Vermiculite and Gemstones
8. Kiambu Carbon dioxide and Diatomite 9. Tharaka Nithi Iron ore, Gemstones and copper 10. Isiolo Gemstones 11. Garissa Gypsum 12. Mandera Gypsum 13. Isiolo Gemstones 14. Marsabit Gold, Manganese, Chromite and Gemstones 15. Elgeyo Marakwet Fluorspar 16. Baringo Gemstones (Baringo Ruby) and Diatomite 17. Nakuru Diatomite and potential fluorite deposits 18. Kajiado Soda ash, Feldspar, Limestone, Gypsum, Gemstones, Marble and Granite (dimension stones) 19. Uasin Gishu Carbon dioxide gas 20. Turkana Gypsum, Oil, Gold and Gemstones 21. West Pokot Gold, Gemstones and Chromite 22. Samburu Gold, Manganese, Chromite, Gemstone and vermiculite 23. Narok (Transmara) Gold 24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Copper	6.	Kitui	
9. Tharaka Nithi Iron ore, Gemstones and copper 10. Isiolo Gemstones 11. Garissa Gypsum 12. Mandera Gypsum 13. Isiolo Gemstones 14. Marsabit Gold, Manganese, Chromite and Gemstones 15. Elgeyo Marakwet Fluorspar 16. Baringo Gemstones (Baringo Ruby) and Diatomite 17. Nakuru Diatomite and potential fluorite deposits 18. Kajiado Soda ash, Feldspar, Limestone, Gypsum, Gemstones, Marble and Granite (dimension stones) 19. Uasin Gishu Carbon dioxide gas 20. Turkana Gypsum, Oil, Gold and Gemstones 21. West Pokot Gold, Gemstones and Chromite 22. Samburu Gold, Manganese, Chromite, Gemstone and vermiculite 23. Narok (Transmara) Gold 24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Copper	7.	Machakos	Gypsum and Pozzolana
10. Isiolo Gemstones 11. Garissa Gypsum 12. Mandera Gypsum 13. Isiolo Gemstones 14. Marsabit Gold, Manganese, Chromite and Gemstones 15. Elgeyo Marakwet Fluorspar 16. Baringo Gemstones (Baringo Ruby) and Diatomite 17. Nakuru Diatomite and potential fluorite deposits 18. Kajiado Soda ash, Feldspar, Limestone, Gypsum, Gemstones, Marble and Granite (dimension stones) 19. Uasin Gishu Carbon dioxide gas 20. Turkana Gypsum, Oil, Gold and Gemstones 21. West Pokot Gold, Gemstones and Chromite 22. Samburu Gold, Manganese, Chromite, Gemstone and vermiculite 23. Narok (Transmara) Gold 24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Copper	8.	Kiambu	Carbon dioxide and Diatomite
11. Garissa Gypsum 12. Mandera Gypsum 13. Isiolo Gemstones 14. Marsabit Gold, Manganese, Chromite and Gemstones 15. Elgeyo Marakwet Fluorspar 16. Baringo Gemstones (Baringo Ruby) and Diatomite 17. Nakuru Diatomite and potential fluorite deposits 18. Kajiado Soda ash, Feldspar, Limestone, Gypsum, Gemstones, Marble and Granite (dimension stones) 19. Uasin Gishu Carbon dioxide gas 20. Turkana Gypsum, Oil, Gold and Gemstones 21. West Pokot Gold, Gemstones and Chromite 22. Samburu Gold, Manganese, Chromite, Gemstone and vermiculite 23. Narok (Transmara) Gold 24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Iron ore 27. Migori Gold and Copper	9.	Tharaka Nithi	Iron ore, Gemstones and copper
12. Mandera Gypsum 13. Isiolo Gemstones 14. Marsabit Gold, Manganese, Chromite and Gemstones 15. Elgeyo Marakwet Fluorspar 16. Baringo Gemstones (Baringo Ruby) and Diatomite 17. Nakuru Diatomite and potential fluorite deposits 18. Kajiado Soda ash, Feldspar, Limestone, Gypsum, Gemstones, Marble and Granite (dimension stones) 19. Uasin Gishu Carbon dioxide gas 20. Turkana Gypsum, Oil, Gold and Gemstones 21. West Pokot Gold, Gemstones and Chromite 22. Samburu Gold, Manganese, Chromite, Gemstone and vermiculite 23. Narok (Transmara) Gold 24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Copper	10.	Isiolo	Gemstones
13. Isiolo Gemstones 14. Marsabit Gold, Manganese, Chromite and Gemstones 15. Elgeyo Marakwet Fluorspar 16. Baringo Gemstones (Baringo Ruby) and Diatomite 17. Nakuru Diatomite and potential fluorite deposits 18. Kajiado Soda ash, Feldspar, Limestone, Gypsum, Gemstones, Marble and Granite (dimension stones) 19. Uasin Gishu Carbon dioxide gas 20. Turkana Gypsum, Oil, Gold and Gemstones 21. West Pokot Gold, Gemstones and Chromite 22. Samburu Gold, Manganese, Chromite, Gemstone and vermiculite 23. Narok (Transmara) Gold 24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Iron ore 27. Migori Gold and Copper	11.	Garissa	Gypsum
14. Marsabit Gold, Manganese, Chromite and Gemstones 15. Elgeyo Marakwet Fluorspar 16. Baringo Gemstones (Baringo Ruby) and Diatomite 17. Nakuru Diatomite and potential fluorite deposits 18. Kajiado Soda ash, Feldspar, Limestone, Gypsum, Gemstones, Marble and Granite (dimension stones) 19. Uasin Gishu Carbon dioxide gas 20. Turkana Gypsum, Oil, Gold and Gemstones 21. West Pokot Gold, Gemstones and Chromite 22. Samburu Gold, Manganese, Chromite, Gemstone and vermiculite 23. Narok (Transmara) Gold 24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Copper	12.	Mandera	Gypsum
15. Elgeyo Marakwet 16. Baringo Gemstones (Baringo Ruby) and Diatomite 17. Nakuru Diatomite and potential fluorite deposits 18. Kajiado Soda ash, Feldspar, Limestone, Gypsum, Gemstones, Marble and Granite (dimension stones) 19. Uasin Gishu Carbon dioxide gas 20. Turkana Gypsum, Oil, Gold and Gemstones 21. West Pokot Gold, Gemstones and Chromite 22. Samburu Gold, Manganese, Chromite, Gemstone and vermiculite 23. Narok (Transmara) Gold 24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Iron ore 27. Migori Gold and Copper	13.	Isiolo	Gemstones
16. Baringo Gemstones (Baringo Ruby) and Diatomite 17. Nakuru Diatomite and potential fluorite deposits 18. Kajiado Soda ash, Feldspar, Limestone, Gypsum, Gemstones, Marble and Granite (dimension stones) 19. Uasin Gishu Carbon dioxide gas 20. Turkana Gypsum, Oil, Gold and Gemstones 21. West Pokot Gold, Gemstones and Chromite 22. Samburu Gold, Manganese, Chromite, Gemstone and vermiculite 23. Narok (Transmara) Gold 24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Iron ore 27. Migori Gold and Copper	14.	Marsabit	Gold, Manganese, Chromite and Gemstones
17. Nakuru Diatomite and potential fluorite deposits 18. Kajiado Soda ash, Feldspar, Limestone, Gypsum, Gemstones, Marble and Granite (dimension stones) 19. Uasin Gishu Carbon dioxide gas 20. Turkana Gypsum, Oil, Gold and Gemstones 21. West Pokot Gold, Gemstones and Chromite 22. Samburu Gold, Manganese, Chromite, Gemstone and vermiculite 23. Narok (Transmara) Gold 24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Iron ore 27. Migori Gold and Copper	15.	Elgeyo Marakwet	Fluorspar
18. Kajiado Soda ash, Feldspar, Limestone, Gypsum, Gemstones, Marble and Granite (dimension stones) 19. Uasin Gishu Carbon dioxide gas 20. Turkana Gypsum, Oil, Gold and Gemstones 21. West Pokot Gold, Gemstones and Chromite 22. Samburu Gold, Manganese, Chromite, Gemstone and vermiculite 23. Narok (Transmara) Gold 24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Iron ore 27. Migori Gold and Copper	16.	Baringo	Gemstones (Baringo Ruby) and Diatomite
Granite (dimension stones) 19. Uasin Gishu Carbon dioxide gas 20. Turkana Gypsum, Oil, Gold and Gemstones 21. West Pokot Gold, Gemstones and Chromite 22. Samburu Gold, Manganese, Chromite, Gemstone and vermiculite 23. Narok (Transmara) Gold 24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Iron ore 27. Migori Gold and Copper	17.	Nakuru	Diatomite and potential fluorite deposits
20. Turkana Gypsum, Oil, Gold and Gemstones 21. West Pokot Gold, Gemstones and Chromite 22. Samburu Gold, Manganese, Chromite, Gemstone and vermiculite 23. Narok (Transmara) Gold 24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Iron ore 27. Migori Gold and Copper	18.	Kajiado	
21. West Pokot Gold, Gemstones and Chromite 22. Samburu Gold, Manganese, Chromite, Gemstone and vermiculite 23. Narok (Transmara) Gold 24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Iron ore 27. Migori Gold and Copper	19.	Uasin Gishu	Carbon dioxide gas
22. Samburu Gold, Manganese, Chromite, Gemstone and vermiculite 23. Narok (Transmara) Gold 24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Iron ore 27. Migori Gold and Copper	20.	Turkana	Gypsum, Oil, Gold and Gemstones
23. Narok (Transmara) Gold 24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Iron ore 27. Migori Gold and Copper	21.	West Pokot	Gold, Gemstones and Chromite
24. Nandi (Kibigoni) Gold 25. Kakamega Gold and Dimension stone 26. Siaya Gold and Iron ore 27. Migori Gold and Copper	22.	Samburu	Gold, Manganese, Chromite, Gemstone and vermiculite
25. Kakamega Gold and Dimension stone 26. Siaya Gold and Iron ore 27. Migori Gold and Copper	23.	Narok (Transmara)	Gold
26. Siaya Gold and Iron ore 27. Migori Gold and Copper	24.	Nandi (Kibigoni)	Gold
27. Migori Gold and Copper	25.	Kakamega	Gold and Dimension stone
	26.	Siaya	Gold and Iron ore
28. Homa Bay Iron ore and Gold	27.	Migori	Gold and Copper
	28.	Homa Bay	Iron ore and Gold

(Source: GoK, 2015a)



Table 1- 3: Distribution of iron ore deposits in Kenya

Ore	e deposit l	ocation	Ore type	Quantity	Quality
1.	Marimante Iron Ore Deposit	Approximately 174km NE of Nairobi in Meru County (38° 57'E;0 10' S)	Titaniferous magnetite (Ilmenite)	Area extend float material over 61m traced for strike distance 0.8km	Grab sample assay yield 40-50% iron and 5-15% TiO ₂
2.	Mraru Ridge Iron Deposit Mraru Ridge	Taita Taveta County 1.8km SSW of Ndile Shopping Center (3° 21' S and 38° 28'E)	Magnetite	Not known	Fe_2O_3 66.98% and 8.7% TiO_2
3.	Wanjala Magnetite Ore Deposit	Taita Taveta County (38°10'E and 3°15'S)	Magnetite	Main occurrence 750m long by 3m thick on average float lateral estimate 50m and thickness 0.3-1.5 m	59-63% iron
4.	Ikutha Iron Ore Deposit	7km south of Ikutha Shopping Center, Kitui County (approximately 38°11' E and 2° 8'S)	Magnetite veins	Ore reserve estimate 80,000 tonnes of 66% Fe ₂ O ₃ magnetite concentrate and 31,000 tonnes of 35 % P ₂ O ₅ apatite	58.7% Fe ₂ O ₃ and 7.6% P ₂ O ₅
5.	Bukura Iron Ore Deposit	15km southwest of Kakamega Town (Kakamega County)	Pyrite veins	This is estimated to contain 17 million tonnes of ore down to a depth of 90m and it is likely the reserves may exceed this figure since lateral extensions are known to exist	Not done
6.	Ndere Island	In Kisumu, the whole of the Ndere Island in the Winam Gulf	Banded limonite ironstones	Many of the ironstone bands are 5m thick, but some, less persistent range from 15 to 60m in thickness	Not done
7.	At Mrima Hill South of Mombasa	Kwale County	Goethite (limonite) and magnetite	3 and 15 million tonnes of Fe_2O_3	10 to over 50% Fe ₂ O ₃
8.	Uyoma Peninsular, northern shores Lake Victoria	Siaya County	Titaniferous magnetite (Ilmenite) (containing 13% TiO ₂) beach sands	The tonnage present is not known but appears to be large and sufficient to warrant further investigation	Magnetite concentrations of up to 90% are known to occur

(Source: GoK, 2005d)

1.2: Mining Sector and Sustainable Development Goals (SDGs)

The policy SESA on the mining sector in Kenya was undertaken with full consideration of SDG framework developed by the UN Sustainable Development Solutions Network in July 2016,¹. The framework enables the mapping of SDGs against the key development agenda in the mining sector. **Table 1-4** highlights the linkages between the mining sector and the SDGs. The analysis in **Table 1-4** demonstrates that although Kenya has a developed policy and legal frameworks, with prescriptions in place to support integration of the sustainable development agenda and the SDGs into the mining sector, some gaps still exist that require corrective action to be taken.

¹ UN Sustainable Development Solutions Network (July 2016) Mapping Mining to the Sustainable Development Goals: An Atlas.



Table 1- 4: Linkages between the mining sector and the SDGs

			tween the mining sector and the SDGs
SDG	Specific goal	Linkage with mining sector in Kenya	Policy and legal framework gaps
1	Mining and Poverty Eradication 1.1 By 2030, eradicate extreme poverty for all people everywhere 1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources 1.a Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation	 Payment of taxes and royalties, including arms-length rule for transfer pricing 	 Provision is not made either in the Mining Act (2016) or Draft Mining (Royalties) Regulations to provide mechanisms for actual delivery of royalties to a community, or the manner of distribution or utilization of such royalty S.109 (i) of Mining Act (2016) obligates a mining license holder to sign a Community Development Agreement with the community where mining operations are undertaken. This is limited to large scale mining license holders only (s.4 definition of Community Development Agreement. The 2017 Draft Mining (Community Development Regulations) have been drafted to guide implementation of s.109 of the Mining Act: Although intended to, among others, provide a legal basis to ensure that benefits of the mining operations or activities are shared between the holder and affected community, does not provide a legal definition for the word "benefit"
		Public disclosure of royalties, and fair distribution system	 Mining Act (2016) does not provide mechanisms for disclosure of information, but at s.211(1) creates an offence: A person who discloses confidential information otherwise than in accordance with this Act, commits an offence and shall be liable on conviction to imprisonment for a term not exceeding six months, or to a fine of not more than five hundred thousand shillings, or both a term of imprisonment and a fine. Confidentiality restrictions under the Mining Act (2016) should be reconciled the provisions for the limitation of the right to access information set out at section 6 of the Access to Information Act Proactive disclosure of information is not provided for under the 2013 regulation
		 Support local content, and local procurement Support local participation in mining value chain 	 The Mining Act and the Draft 2016 Mining (Use of Goods and Services) Regulations do not provide for public disclosure of the returns provided by mining operators with respect to their compliance with the local content and local procurement rules
		 Dedicated legal framework, incentives and regulation for artisanal mining 	 In membership to Artisanal Mining Committee, an assumption is made that there will be only one association of artisanal miners within a county Regulations will be required to provide details on further regulation and governance of artisanal mining, including support in training, and fair trade of artisanal miners – which s.93 requires the government to provide as support There is no provision for fiscal incentives that maybe provided to artisanal miners or associations
3	Good Health and Well-being 3.3 By 2030, end the epidemics of HIV/AIDS, tuberculosis, malaria and neglected tropical diseases, and other communicable diseases 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	 Safeguard occupational health and safety in mining operations Addressing HIV/AIDs challenges at the work place 	 There is no linkage with governance framework for occupational diseases, such as tuberculosis Direct linkage of HIV/AIDs as a challenge to mining sector can be addressed as part of the Occupational Health and Safety Regulations proposed under s.178(2) of the Mining Act



4	Quality Education 4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education 4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university 4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship	 Invest in quality industry relevant training to enhance citizen job opportunities Regulate continuous in-service training for mining workers to update with risks management, business practices, etc Completion of basic education by children to minimize risk of, or eliminate child labour 	 The provision does not address continuous in-service training of mining workers to update with risks management, business practices etc S.46 of the Mining Act (2016) does not require affirmative action for gender and youth mainstreaming in preferential recruitment and training of Kenyan citizens
5	Gender Equality	 Make equal opportunities for women an immediate goal Make artisanal mining opportunities and rules gender responsive 	 The Mining Act (2016) makes provisions requiring mining right holders to take steps to provide opportunities for Kenyan citizens: (s.46) - a detailed programme for the recruitment and training, and (s.47) - preference in employment to members of the community and citizens of Kenya. The provision assumes gender equality, and does not make any specific provision for affirmative action to provide certain preferences to women, in order to progressively move towards equality. The provisions of the Mining Act (2016) relating to small scale and artisanal mining do not provide expressly for affirmative action for opportunities for women as a progressive step towards gender equality
6	Clean Water and Sanitation	 Watershed protection and management Regulations for compliance and enforcement against use of toxic chemicals Integrate watershed protection into Environmental Management Plans, and Audits Industrial water recycling 	 No provision is made regarding industrial water recycling Section 4 of Mining Act (2016) provides definition of mining support services which although not explicitly defining industrial waste water recycling as part of mine support services, includes the generic category of "any other services specifically and exclusively related to mining, which the Cabinet Secretary considers necessary for the effective and sustainable development of the mining industry," which through regulations can be extended to industrial waste water recycling The 2016 Draft <i>Mine Support Services Regulations, 2015</i> can be modified to make provision and provide a mechanism through which industrial symbiosis can be enhanced for businesses that can carry out industrial waste water recycling, including from waste water treatment plans, which can be supplied to mining operators as recycled water for industrial use There is need for regulations to address the restrictions and exceptions to seepage of toxic waste into streams under s.179. However, it is important to reconcile s. 179 with rule 81-92 of the 2007 Water Resources Management Rules, made under the Water Act, regarding control of effluent discharge and control of pollution and the role of the Water Resources Management Authority over mining operations.
7	Affordable and clean energy	 Renewable energy options Fiscal incentives for uptake of cleaner, renewable energy options Energy audits, and investments in operations and maintenance for energy grids to minimize leakages 	 Mining Act 2016 does not make any provisions on access to energy, or preference for clean or renewable energy for mining operations Definition of a facility – for purposes of undertaking of an energy audit under the Energy (Management) Regulations 2012 includes a factory, commercial buildings, and institutional buildings, local authorities but not mining operations The designation under s.105 of Energy Act, and regulation 7 is limited to factories or buildings, and does not explicitly including mining operations



8	Decent work and economic growth	 Implementing impact-benefit/community agreements. Drive local economy with direct procurement opportunities Analyze economic limits of mining, including exposure to global economic shocks and communicate to stakeholders Economic diversification to mitigate against external shocks 	 The provisions of the 2017 Draft Mining (Community Development Regulations) do not provide a legal definition of benefit. Regulation 11(7-a) provides an obligation on the mineral right holder to provide undertakings, with respect to the social and economic contributions, that the project will make to the sustainability of the affected community. The regulations should provide details on the expected scope and parameters of such undertakings and socio-economic contributions Regulation 11(7-b) requires the mineral right holder to provide assistance in creating self-sustaining, income- generating activities, such as, but not limited to, production of goods and services needed by the mine and the community; This clause has the impact of providing an avenue through which the local community can join the mining operations value chain. It also fits the scope and meaning of mine support services specified under the Mining Act, and the Mine support services mining regulations. The regulations should be amended to include this role for communities and by including communities in the mine support services, their role in the mining operations value chain will be more enhanced.
12	Responsible consumption and production	Life-cycle approach to mining – including investment in industrial ecology options such as waste conversion re-use, e.g. recycling of waste water, re-use of mine tailings, etc.	S.180 regarding site restoration and mine-closure, and the regulations made for this purpose must be reconciled with the provisions of EMCA and the Environmental (Impact Assessment and Audit) Regulations of 2003, particularly the contents of an Environmental Management Plan on site restoration and mine-closure procedures
13	Climate Change	Take measures to reduce Greenhouse Gas (GHG) emissions Structuring business models to enhance Investments in climate resilience of mining operations and local communities Invest in relevant research and development	through a requirement for all sectors, including mining, to take steps to mainstream climate change actions into their mandates and operations.
15	Life on Land	 Mainstreaming biodiversity into mining policies, plans and laws Conduct EIA's including compliance monitoring and audit 	National Biodiversity Strategic Action Plans (NBSAP) are the main policy tool for guiding the mainstreaming biodiversity into sector areas such as mining. The Kenya NBSAP of 2000 is undergoing revision and should be examined to include the risks posed by mining operations to biodiversity in Kenya and actions to be taken



The above assessment demonstrates that Kenya has a developed legal framework, with prescriptions in place to support integration of the sustainable development agenda and the SDGs into the mining sector, but that gaps still exist in law that require corrective action to be taken.

1.3: Current Status of the Mining Sector in Kenya

In the recent past, Kenya has seen a burst of mining investor interest due to the increased global demand for precious metals and minerals (UNDP, 2014; NCI, 2015). The country has proven deposits of titanium, gold and coal, and is estimated to hold significant deposits of copper, niobium, manganese and rare earth minerals. However, further geological exploration is required in order to get a full and clear picture of the country's mineral resources. Substantial infrastructure upgrades will also be necessary to effectively exploit the proven mineral deposits. Ultimately, the increasing amount of mining revenue will help to diversify and expand the national economy and transform the country into a key mining hub in Eastern Africa (UNDP, 2014; GoK, 2015a).

One of the challenges associated with the expected growth in the mining sector is the need to ensure good sectoral governance in order to avoid the problems which other countries especially in Africa have encountered such as:- a) inequitable sharing of mineral resource benefits with a skewed favor for those in power, b) neglect of local host communities and economies where such resources are located, c) mineral related conflicts across inter-county and international and boundaries, d) conflicts between existing land uses such as agriculture and livestock husbandry and mining activities, e) environmental degradation due to mining activities, and f) violation of human rights by mining activities. The recent introduction of devolved governance in Kenya provides an opportunity for sustainable management of mineral resources by taking the interests and rights of the locals into consideration. Accordingly, there is need to evaluate the current governance framework in the mining sector to determine its effectiveness in ensuring harmony between mining activities and other national and county interests, especially environmental protection and human rights. This is necessary in order to ensure harmony between the mining sector and sustainable development, including adequate stakeholder engagement and participation, good governance and the rule of law. All this is aimed at avoiding the resource curse paradox in Kenya which has affected many other mineral endowed countries in Africa (African Development Bank 2007, Appiah & Zhang 2013, Demissie & Naghshpour 2014).

1.3.1: Sector Management

The management of the mining sector in Kenya was historically managed through the Department of Mines and Geology which was established in the 1930's through the Mining Ordinance of 1933 (GoK, 2005d; UNDP, 2014). Thereafter, the sector was operated, for many years, under the Mining Act of 1940 which was revised twice in 1972 and 1987 (GoK, 2005d; UNDP, 2014). In 2016, the government in collaboration with mining stakeholders enacted a new policy and legislation, in the form of the Minerals and Mining Policy (2016) and Mining Act of 2016, to govern all aspects of the sector, including environmental and human rights protection (GoK, 2016). The overall goal of the Mining and Mineral Resources Policy is to set out frameworks, principles, and strategies to provide for exploration and exploitation of mineral resources for enhanced socio-economic development. In addition, a number of regulations have been developed with the aim of supporting implementation of the Mining and Mineral Resources Policy (2016) as well as the Mining Act (2016). It is envisioned that this will eventually ensure the sector diversifies the country's economic pillars, whilst contributing to rapid and sustainable socio-economic development based on Kenya's Vision 2030 development blue print and the global Sustainable Development Goals (SDGs). The management of the mining sector, under the new governance framework, is undertaken through a wide range of institutions and agencies including:-

- Ministry of Mining (MoM)
- Directorate of Geological Surveys
- Mining Rights Board



- Directorate of Resource Surveys and Remote Sensing (DRSRS)
- National Mining Corporation (NMC)
- Ministry of Energy
- Ministry of Environment and Natural Resources (MENR)
- National Environment Management Authority (NEMA)
- Directorate of Occupational Health and Safety Services (DOSHS)
- County Governments
- The Kenya Chamber of Mines (KCM)
- Association of Artisanal and Small-Scale Miners (ASSM)
- National Land Commission (NLC)

Despite the above effort, the overall management of Kenya's mining sector still requires attention in order to ensure proper sector governance on the long term. This is one of the envisioned goal and aim of the Mining Act (2016) through which a fully-fledged Ministry of Mining was created. Additionally, an interministerial committee comprising of the Ministry of Mining, Ministry of Industrialization, Ministry of Energy, Ministry of Environment and Natural Resources, NEMA, Treasury, and the State Law Office has been established as a platform to formulate better policies for licensing of exploration, exploitation, and development of mineral deposits. However, one of the key mining sector management challenges is institutional cooperation and coordination due to the many institutions and agencies involved.

1.3.2: Current and potential and management challenges in the mining sector

Although mining in Kenya dates back to colonial times, its full potential has never been realized because most of the mineral resources are either partly exploited, unexploited, or unidentified (NCI, 2015; UK Aid, 2013). The earliest form of mineral exploitation in the country was gold mining with many near-surface gold extraction sites by local artisanal miners, and numerous historic colonial-era mines in the Nyanzian belt (NCI, 2015). One of the key factors that have contributed to the slow take-off in the mining sector since colonial times is the fact that Kenya's development agenda has tended to focus more on other sectors especially agriculture, manufacturing, and tourism, and service sectors, with little attention going to the mining sector (NCI, 2015). However, in the near future this situation is expected to change considerably as new vast reserves of oil, coal, natural gas and other minerals are discovered and are in the process of being exploited.

Mineral exports and associated revenue returns in Kenya have been observed to increase in the last couple of years as shown in **Figure 1-6, Table 1-5** & **Table 1-6.** For instance, in February 2014, the country exported 25,000 metric tonnes of titanium ore, and the country is expected to become a key global producer of this mineral (GoK, 2015a). According to GoK (2015d), the quantity of soda ash produced in 2005 was estimated at 360,161 metric tonnes and fluorspar at 109,594 metric tonnes (**Table 1-5**). Additionally, the total value of the 8 key minerals produced in the country was estimated at Kenya Shillings (Ksh) 9.06 billion in 2005, which increased to nearly Ksh.10.9 billion in 2006, Ksh18.8 billion in 2008 and Ksh22 billion in 2009 (**Table 1-5**). In the same period (2005-2009), the export levels for soda ash and gold stood at 321,429 metric tonnes and 616,156GMS respectively, with the total mineral export value for the 8 key minerals estimated at Ksh 6.13 billion (**Table 1-6**). The highest total value for these minerals was in 2007 and 2008 at roughly Ksh10 billion for each year.

With more development in the mining sector coupled with improved mineral rights, it is projected that Kenya can position itself as a key regional player in the mining sector in the East African region (GoK, 2005d). The recent discovery of large quantities of world class rare earth mineral deposits in the coastal region valued at about \$62.4billion will put the country in the top 5 nations in the world endowed with this mineral (GoK, 2015a). Recent discovery of high quality niobium at Mrima Hills in Kwale Country is eventually expected to position Kenya as the 6th country in the world in terms of availability of this treasured mineral



(GoK, 2015a). Coal is another recently discovered mineral resource in the country and the Ministry of Energy postulates that the national benefits of the newly discovered coal deposits in the Mui Basin will include; a) enhanced energy security in the country, b) growth of the coal sub–sector, and, c) macro industrial development and growth of other industries (Diakonia, 2014). Local benefits from coal mining are expected to include; a) provision of alternative local employment opportunities, b) coal revenue sharing by local communities, county and for national government, c) corporate social responsibility (CSR) opportunities for host communities, and, d) stimulation of local businesses.

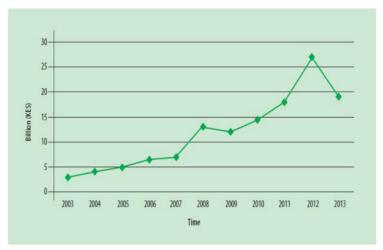


Figure 1- 6: Overall mineral production value (Ksh) for Kenya's mining sector (2003-2013) – KNBS (2013)

The mining sector in Kenya is associated with a number of challenges including inadequate crop of skilled mining experts and personnel (GoK, 2005d; IEA, 2014; NCI, 2015). This is associated with the reliance of a large number of mining practitioners on the traditional artisanal approach (**Plate 1-1**). In most instances, artisanal mining is carried out under informal arrangement with no government oversight mainly by poor people who are currently estimated at 30,000 (UK Aid, 2013; NCI, 2015). This kind of mining is commonly associated with gold and gemstones which are currently extracted especially in Taita Taveta and Migori counties. However, this mining approach is considered to be backward due to a wide range of issues like; improper health and safety considerations, child labour, environmental pollution, tax evasion and mineral smuggling. However, it is expected that with proper management though a favorable legal framework, artisanal mining can be enhanced in the country and ultimately scaled-up in terms of production and revenue generation. In this regard, the new Mining Act of 2016 is expected to play a major role in revamping and mainstreaming this informal mining sector into a formal sector. Nonetheless, some challenges are expected in expected effort to engage communities in the sector due to:-

- a) Increased encroachment into artisanal concession areas by large-scale companies with new mineral discoveries around the country. This is a potential source of conflict which can lead to tension, and even violent conflicts,
- b) Repression of artisanal mining in favor of large scale miners thereby creating fertile ground for conflicts with regard to accessing mining concession areas.
- Lack skills and suitable mining technology by artisanal sector practitioners and operators thereby making mining difficult, hard, slow and unsafe. Some of the key dangers arising from this situation includes; poor work area ventilation, lack of safety equipment, inappropriate use and handling of mining chemicals,
- d) Difficulties of accessing markets for their minerals,
- e) Lack of financing to upscale to large scale mining.



Table 1- 5: Quantity and value (Ksh) of the mineral production in Kenya (2005 to 2009)

rable 1 31 Quartery and value (1611) of the fillificial production in feeting (2003 to 2003)											
		2005		2006		2007		2008		2009	
Mineral	Unit	Qnty	Value	Qnty	Value	Qnty	Value	Qnty	Value	Qnty	Value
Soda Ash	MT	360,161	3,782,249,000	374,210	4,532,391,000	386,578	4,769,457,000	502,846	8,881,714,000	404,904	6,085,430,000
Fluorspar	MT	109,594	1,061,908,000	132,030	1,155,794,000	85,115	995,867,000	130,100	1,949,194,287	5,500	122,540,000
Crushed Refined Soda	MT	640,291	3,287,710,000	662,939	4,317,757,000	843,043	5,448,046,000	865,788	6,974,924,000	948,076	13,202,957,000
Salt (from Magadi)	MT	26,595	110,382,000	35,024	164,438,000	11,596	58,068,000	24,345	139,171,000	24,125	154,730,000
Carbon Dioxide	MT	8,723	63,310,000	9,359	66,730,000	11,028	78,630,000	22,030	117,884,660	15,711	84,071,080*
Diatomite	MT	243	9,865,000	185	7,735,000	201	8,859,000	72	3,483,917	239	14,482,508
Gold	GMS	616	653,339,000	432	583,865,000	3,023	3,922,892,000	339,923	592,890,948	1,055,070	2,283,686,205
Gemstones	GMS	5,035	101,501,000	5,044	94,046,000	8927	110,975,000	20,933,983	178,606,352	474,992,600	158,162,279
Grand Total			9,060,459,000		10,922,756,000		15,392,794,000		18,837,869,164		22,021,987,992

(Source: GoK, 2005d)

Table 1- 6: Quantity and value (Ksh) of the mineral export in Kenya (2005 to 2009)

Mineral		2005		2006		2007		2008		2009	
	Unit	Qnty	Value	Qnty	Value	Qnty	Value	Qnty	Value	Qnty	Value
Soda Ash	MT	321,429	3,858,117,000	316,077	4,026,646,000	307,289	3,937,130,000	389,100	7,214,146,000	365,358	5,086,583,000
Gold	GMS	616,156	653,398,888	432,371	583,864,799	3,023,325	3,922,891,880	339,923	592,890,948	1,055,070	2,283,686,205
Fluorspar	MT	109,594	1,061,907,940	132,030	1,155,794,760	85,115	995,867,000	130,100	1,949,194,287	5,500	122,540,000
Diatomite	MT	243	9,865, 390	185	7,734,573	201	8,858,820	72	3,483,917	239	14,482,508
Crushed Refined Soda	MT	3,293	24,017,000	5,085	35,736,000	54,695	430,391,000	38,280	321,140,000	16,331	140,929,000
Salt (Magadi)	MT	72	1,300,800	837	6,627,600	2,109	15,505,000	1,106	12,574,000	592	6,655,000
Carbon Dioxide	MT	-	-	5,048	118,664,603	5,645	127,875,238	22,030	117,884,660	5,834	129,413,044
Gemstones	GMS	68,404,514	340,157,980	50,439,006	240,467,344	119,286,901	199,135,181	20,933,983	178,606,352	474,992,600	158,162,279
Other Minerals	MT	58,260	179,594,065	95,012	90,020,643	218,043	409,491,000	63,745,187	23,109	23,109	43,841,005
Grand Total			6,128,359,063		6,265,865,322		10,047,145,119		10,453,665,351		7,986,292,041

(Source: GoK, 2005d)





Plate 1- 1: The crude nature of artisanal and small scale mining in Kenya

At the moment, Kenya is unable to meet the labour and skills demands of international mining companies thereby forcing the citizenry to miss out and encourage labour imports from mining specialized nations such as South Africa, Australia, Canada and China. However, in the last couple of years, training and skill development training has been offered by different institutions such as; Petroleum Institute of East Africa (PIEA), University of Nairobi, Jomo Kenyatta University of Agriculture and Technology, and Taita Taveta University College. In addition, the Ministry of Petroleum and Energy is also undertaking some professional training. However, there are concerns that the current training programmes are not preparing and creating well equipped and skilled manpower to meet the needs of the mining industry.

1.3.3: Environmental issues associated with the mining sector

Kenya's mining sector is associated with a wide range of environmental risks especially with regard to; excavation and earthworks, environmental pollution by tailings disposal and emissions, disturbance and loss of biodiversity and ecosystems (UNDP 2014; NCI 2015). Generally, the exploratory and mining activities lead to extensive vegetation clearing presenting a threat to preservation of native flora biodiversity (**Plate 1-2 & 1-3**). Such sites then become vulnerable to degradation processes through soil erosion especially where soils are loose or heavy rains are prevalent. When large quantities of soils or sediments are washed away, they are likely to be deposited in water bodies such as; rivers, streams, dams and lakes creating siltation, water contamination and other bio-physical alterations (NCI, 2015). Waste management arising from different stages of mining processes is also a major environmental problem (**Plate 1-4**). The solid waste generated during mining is flushed and washed into aquatic environments especially during heavy storms thereby leading to water pollution (NCI, 2015). Depending on the degree of pollution, this can lead to serious health risks to the public, livestock and wildlife including aquatic life such as birds and fish.

In addition, the mining sector in many countries is associated with a wide range of negative social impacts including; child labour, health and safety risks, loss of communal and private land, resource-oriented conflicts inequalities, loss of revenue through corruption and lack of transparency (NCI, 2015). Noise and vibrations arising from mining activities are currently of great public health concern to communities living near mining sites, and complaints on this disturbance are very prevalent in the country for instance where quarrying takes place (NCI, 2015). Dust emissions and disturbance associated with blasting are equally issues of great concern, and in some instances, they have been reported to cause diverse respiratory health problems among communities, whilst threatening their safety due to blasting. Unfortunately, mining area



host communities in most parts of the country have not been adequately sensitized and equipped with the appropriate information, knowledge and skills to hold mining investors accountable for any environmental damage caused. This has partly contributed to some of the environmental problems people are currently facing in some parts of the country (OLF, 2012; IEA, 2014; NCI, 2015).



Plate 1- 2: Quarrying sites in the Kitengela Wildlife Dispersal Area



Plate 1- 3: Vegetation clearance in an artisanal mining site in Kenya



Plate 1- 4: A pile of waste rocks generated by quarrying activities in the Kitengela wildlife dispersal area



1.3.4: Human rights issues in the mining sector

The mining sector throughout the world has been considered to be associated with a high risk of violating human rights in a number of ways as shown in **Figure 1-7**. These challenges must be addressed in a collaborative manner by governments since they have a duty to protect human rights, as well as mining companies through corporate social responsibility.



Figure 1-7: Potential human rights impacts in the mining sector

The Constitution of Kenya, 2010, has clearly outlined the various types of human rights which all Kenyans are entitled to, and which should not be violated by any development including activities in the mining sector. These rights are provided in Chapter 4 of the Constitution of Kenya under the Bill of Rights shown in **Table 1-7**. Article 42 of the Constitution, for example, provides the right to a clean and healthy environment for the benefit of present and future generations. This right includes a procedural right, under Article 70, that creates a legal pathway for anyone whose environmental right has been violated, or about to be violated, to apply to a court for redress through legal remedies. In addition, Article 42 is fulfilled through the measures and mechanisms that are set out in Article 69 of the Constitution, which include, among others, several obligations on the Kenyan state to:-

- a) Ensuring sustainable exploitation, utilization, management and conservation of the environment and natural resources, and ensuring equitable sharing of the accruing benefits,
- b) Working towards a minimum tree cover of at least ten per cent of the land area of Kenya,
- c) Protecting and enhancing intellectual property in, and indigenous knowledge of, biodiversity and the genetic resources of the communities,
- d) Encouraging public participation in the management, protection and conservation of the environment,
- e) Protecting genetic resources and biological diversity,
- f) Establishing systems for environmental impact assessment,
- g) Undertaking environmental audit and monitoring of the environment,
- h) Eliminating processes and activities that are likely to endanger the environment, and
- i) Utilizing the environment and natural resources for the benefit of the people of Kenya.

In addition, Articles 35, 43, 46 and 47 set out the rights of access to information, the economic and social rights, consumer rights and rights for fair administration, respectively.

Like in other parts of the world, Kenya's mining sector is characterized by a variety of risks of human rights violation and this needs to be effectively addressed as the government embarks on up-scaling the sector (KNCHR, 2013; KNCHR, 2016). Consequently, the new Mining Act (2016) is expected to create an enabling environment that will enhance mitigation and creation of mechanisms that will promote respect for human rights in the industry. This should also be done by domesticating regional and international principles and best practices aimed at respecting human rights. In addition, for purposes of upholding the human rights guaranteed

in the Constitution of Kenya, Mining Act (2016), must be read together with, and in context of the various other laws and policies that provide for, and govern other aspects of human rights, as analyzed in Chapter 2 of this SESA report. This is important in order to undertake a detailed evaluation on the integration and observation of human rights in the mining sector in order to ensure harmony between mining activities, people and their livelihoods.

Table 1- 7: Human rights in the Constitution of Kenya

	Table 1- 7: Human rights in the Constitution of Kenya
National	Relevant human rights obligations
Constitution of	
Kenya, 2010	
	Chapter 4: The Bill of Rights
	2) Every person shall enjoy the rights and fundamental freedoms in the Bill of Rights to the
	greatest extent consistent with the nature of the right or fundamental freedom
	Part 2. Rights and fundamental freedoms
	26 . Right to life (in relation to mining accidents)
	27. Equality and freedom from discrimination
	28. Human dignity
	32. Freedom of conscience, religion, belief and opinion
	33. Freedom of expression
	35 . Access to information - This right is restricted to citizens of Kenya, and provides a legal
	entitlement to information that is held by the State (government, and public entities); and a
	further entitlement to access information held by private persons (including private companies)
	only in situations where such information is necessary for the fulfilment of a fundamental
	rights. In addition, this right requires the government to proactively disclose and publicize
	information for public awareness.
	36 . Freedom of association
	40 . Protection of right to property including the right to hold and own property in any part of
	Kenya, and the entitlement to the prompt payment of just compensation if property is acquired
	by the State for public purposes, and/or in the public interest. Eligible purposes are defined in
	section 2 of the 2012 Land Act.
	42. Environment
	Every person has the right to a clean and healthy environment, which includes the right to
	(a)Environmental protection for the benefit of present and future generations; and
	(b)have obligations relating to the environment fulfilled under Article 70
	Article 70. Enforcement of environmental rights
	(i) Right to a clean and healthy environment
	(ii) Prevention of acts that are harmful to the environment
	(iii) Compensation for any victim of a violation of the right to a clean and healthy
	environment
	43. Economic and social rights
	(1) Every person has the right to
	(a) the highest attainable standard of health;
	(b) adequate housing, and to reasonable standards of sanitation;
	(d) clean and safe water in adequate quantities;
	(e) social security; and
	(f) education.
	46. Consumer rights
	(a) to goods and services of reasonable quality;
	(c) to the protection of their health, safety; and
	(d) to compensation for loss or injury arising from defects in goods or services
	47. Fair administrative action
	(1) right to administrative action that is expeditious, efficient, lawful, reasonable and
	procedurally fair
	(2) (b) efficient administration

The Government of Kenya established the Kenya National Commission for Human Rights (KNCHR) as the institution responsible for overseeing the implementation of human right interventions in the country (KNCHR, 2013). KNCHR is mandated to ensure that the government and investors in the public and private



sectors including the mining industry observe human rights issues as articulated in the constitution (KNCHR, 2016). Its existence presents a great opportunity with regard to ensuring that all human rights violations and abuse in the mining sector are addressed. The functions of the commission as spelt out in Section (8) of the Act are to;

- a) Promoting respect for human rights and developing a culture of human rights in the county,
- b) Taking steps to secure appropriate redress where human rights have been violated,
- Acting as the principal state organ in ensuring compliance with obligations under regional and international and conventions and treaties relating to human rights, except those related to the rights of special interest groups protected under the law relating to and non-discrimination and equality,
- d) Promoting observance and protection of human rights in public and private institutions,
- e) Investigating, monitoring and reporting on observance of human rights in all life aspects in the country,
- f) Receiving and investigating complaints on human rights abuse allegation, except those relating to the violation of the principle of freedom and equality from discriminations under gender parity and equality principles,
- g) Initiating, investigating or researching a matter in respect of human rights on the basis of complaints or complaints and making recommendations to improve the functioning of state organs,
- h) Creating and promoting public awareness on human rights and the obligations of a citizen under the constitution and any other written law in the country.

The KNCHR normally receives information of human rights violations from the public including those associated with mining operations. The human rights violations can be classified into 3 categories, namely; i) group rights including the rights of special interest groups such as women, children, the elderly, marginalized communities and persons living with disability; ii) civil and political rights, including public participation, rights to political participation and access to justice and, iii) socio-economic rights including the rights to education, health, water and sanitation, environment, housing and social security. In 2008 and 2012, socio-economic and cultural violations in the country were the most reported cases of human rights abuse as shown in **Figure 1-8**.

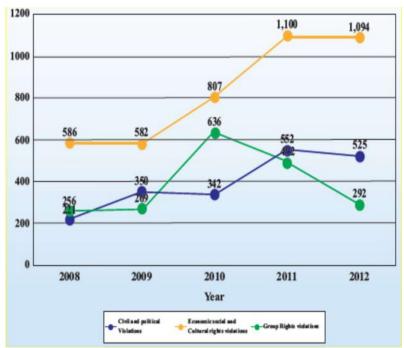


Figure 1- 8: Reported human rights violations in Kenya (2008-2012) Source: KNCHR, 2013) (Green line=Group rights violations, Blue=Civil and political rights violations, Orange=Socio-economic and cultural rights violations. Vertical axis represents count of each category)



Reports have indicated that both civil and political rights violations increased in the 2008-2012 period but were much lower than the socio-economic and cultural violations. On the other hand, violation of group rights increased sharply from 2008 to 2010 but dropped sharply thereafter. Given the great interest the mining industry has created in the country among different interest groups and stakeholders, including the economic growth expectations, human rights violations arising from development of this sector are likely to be rampant especially in mineral host community areas.

1.3.5: Transparency and Accountability in the Mining Sector

In addition to human rights, the mining sector in Kenya is subject to a wide range of obligations associated with the need for transparency and accountability. The sector is usually subjected to commercial agreements between mining investors, government and host communities or individuals in the mining areas (UK Aid, 2013, Mutua, 2014; NCI, 2015). This is in line with the Extractive Industries Transparency Initiative (EITI). EITI is a global standard aimed at promoting open and accountable management of extractive resources and strives to address key governance issues in the mining, oil and gas sectors (Darby 2008, NCI, 2015, Rich & Moberg 2015). The EITI interests cover a wide range of issues including; how mining licenses and contracts are allocated and registered, beneficiaries and owners of mining operations, fiscal and legal arrangements in mining deals, how much is produced, how much is paid, allocation of mining revenues, and what is the contribution to the economy, including employment. The framework safeguards integrity by holding all EITI implementing countries to the same global standards. So far EITI standards have been enacted in 51 countries around the world including; Mozambique, Tanzania, France, Britain, USA and Australia (NCI, 2015). Although Kenya is not a member of the EITI family of nations, the Ministry of Mining has made a public commitment to EITI but no significant steps have been taken by the government to embrace this initiative (NCI, 2015).

The Constitution of Kenyan, 2010, strongly advocates for transparency in the government plus its operations in the country (GoK, 2010b; KNCHR, 2013 & 2016). For example, Article 35 grants the right to access information held by the government and its agencies; and for access to information held by private citizens if that information is necessary for enforcing a right. This right is, however, restricted to citizens, defined in section 2 of the 2016 Access to Information Act as any individual who has Kenyan citizenship, and any private entity that is controlled by one or more Kenyan citizens. The right of access to information is complemented in enhancing transparency by the Fair Administrative Action Act (2015), which is the legal framework for implementation of Article 47 of the Constitution, and provides a right for every person to administrative action which is expeditious, efficient, lawful, reasonable and procedurally fair; and this right extends to an entitlement for every person to be given written reasons for any administrative actions that is taken against them. Administrative action, under this law, is defined to include; the powers, functions and duties exercised by authorities, and quasi-judicial tribunals. For purposes of the mining sector, the Fair Administrative Practices Act (2015) is a valuable legal framework because it is mandatory for state agencies exercising administrative authority, for instance those institutions created under the Mining Act (2016), as well as those institutions exercising functions under other legal frameworks that impact the mining sector, such as the National Environment Management Authority (NEMA), which exercises extensive powers under the EMCA, which impact the mining sector, including EIAs and Audits.

Thus, as Kenya prepares to upscale the mining sector to exploit its enormous economic potential, the government should among other things examine the applicability of, and adopt various international best practices on mining governance that are relevant and beneficial to the country. These include: -

- a) National adoption and enactment of EITI standards for application in Kenya including through embedding in regulations made under the Mining Act (2016),
- b) Committing to an open and competitive bidding system which should be embedded in the Minerals and Mining Policy (2016), the Mining Act (2016) and the subsidiary regulations,
- c) Committing to agreement/contract transparency which is in line with emerging trends in the mining sector globally,
- d) Promoting transparency in all levels of the entire mining value chain and not just revenue management by focusing on outcomes rather than the process. This should be augmented by clear



remedial guidelines in the event that transparency requirements are found to have been violated. In addition to the overall access to the justice framework for protection of fundamental human rights, under Article 22 and 70 of the Constitution, legal frameworks on transparency and accountability, such as those relating to access to information and fair administrative practice – as well as the laws establishing independent constitutional commissions (human rights, gender and equality and the Ombudsman) and providing mechanism through which human rights violations can be reported, investigated and remedies provides. These are examined in Chapter 2 of this report.

In the case of (b) and (c), best practices are available from the Open Contracting Partnership, which includes the Open Contracting Global Principles for disclosure and participation in public procurement,² which serve as a guide to advance open contracting around the world; and the Open Contracting Data Standard (OCDS),³ which is intended to enable disclosure of data and documents at all stages of the contracting process by defining a common data model to support organizations to increase contracting transparency, and allow deeper analysis of contracting data by a wide range of users.

1.4: Sustainable Management in the Mining Sector

The Second Medium Term Plan 2013-2017 of Vision 2030 considers development of mineral resources a priority in Kenya and states that exploitation of such resources is expected to benefit the people of Kenya in a much bigger way. Consequently, one of the major goals for the Government of Kenya is to ensure that accelerated exploitation of mineral resources in the country does not lead to environmental degradation and pollution including having negative social impacts on people and their livelihoods. Such risks are commonly associated with the exploration, exploitation and processing of mineral resources because mining activities as shown in **Box 1-1**.

Box 1- 1: Environmental and social risks in the mining sector

Environmental • Habitat alternations, with adverse impacts for local communities, flora and risks fauna • Waste management, including general wastes and hazardous waste • Gaseous emissions Hazardous effluents Use of explosives • Specific hazards in underground mining (fires, explosions) • Water contamination • Reduction in local water supply from overuse Energy use • Non-compliance with local environmental laws and regulations Social risks Child labour · Forced labour Worker exposure to hazardous materials Use of explosives • Physical hazards, notably from underground mining (fires, explosions, confined spaces) • Non-payment of minimum wages • Lack of proper labour contracts • Lack of workplace associations/unions • Lack of proper training and protective equipment for workers • Community concerns over land alternations from mining • Resettlement of local communities from new or expanded mining operations • Inflow of non-local workers to new or expanded mining sites, with potential adverse impacts for local communities such as an increase in prostitution

³ See: http://standard.open-contracting.org/latest/en/# (accessed 18 May 2017)



² See: http://www.open-contracting.org/get-started/global-principles (accessed on 18 May 2017)

and HIV/AIDS prevalence, especially if new non-local male workers are not with their families

- Impacts on indigenous populations
- Impacts on cultural heritage
- If the mining site is remotely located, there are risks for improper living conditions for workers and their families
- Risks associated with the use of a company security force
- Non-compliance with local health and safety laws and regulations

According to the Environmental Management and Coordination Act (EMCA, Cap 387), the management of all development activities in mining areas should be approved under appropriate legislation. The central legislation which serves as the bedrock of environmental protection in Kenya is the EMCA Cap 387. This framework provides the overarching legislation that takes precedence over all other sectoral legislation that touch on any aspect of environmental management, including the mining law. EMCA Cap 387, through section 9, has established the National Environment Management Authority (NEMA) with powers to, among others, engage its authority in Environmental Impact Assessment (EIA) study reports (including undertaking public consultations at the EIA study review stage) and to either grant or refuse to grant approval to all mining projects based on the findings of mining project EIA studies. Details of the procedure for undertaking an EIA study as well as the review process by NEMA as required by the Environmental (Impact Assessment and Audit) Regulations, 2003.

It is important to note that in the Second Schedule to the EMCA Cap 387, mining is set out as a mandatory activity that requires the submission of an EIA report to determine whether such projects will be approved or not. The scope of mining is defined to include quarrying and open case extraction of; a) precious metals, b) gemstones, (c) metalliferous ores, d) coal, e) phosphates, f) limestone and dolomite, g) large scale commercial stone and slate, h) commercial large-scale harvesting of aggregate, sand, gravel, soil and clay, i) exploration for the production of petroleum in any form, j) extracting alluvial gold with use of mercury, and k) Geothermal energy exploration and production.

Prior to 2015, the only legal provision for Strategic Environmental and Social Assessment (SESA), was through Regulation 42 and 43 of the 2003 Environmental (Impact Assessment and Audit) Regulations. With the 2015 amendments to EMCA Cap 387, the law provides a mandatory requirement for SESA, to be undertaken by the responsible entities, with respect to all policies, plans and programmes (PPPs) as prescribed in Sections 41-50. Section 41 (1) states that the Authority shall in consultation with county governments, lead agencies, institutions and private entities subject all proposals for policy, plans or programmes to a Strategic Environmental Assessment to incorporate environmental considerations for sustainable development. Section 41 (2) specifies that the objectives of a Strategic Environmental and Social Assessment study shall be to: (a) guide policy, programme or plan proposals to ensure they are compatible with sustainable environmental planning and management. The law requires that all entities undertake or cause the SESA to be undertaken, at their own expense, and shall submit such assessments (SESA report) to NEMA for approval. In addition, NEMA is required to consult with lead agencies and relevant stakeholders to prescribe rules and guidelines in respect of Strategic Environmental and Social Assessments.

1.5: Strategic Environmental and Social Assessment (SESA) for the Mining Sector in Kenya

The SESA is a pro-active decision support instrument, acting as a 'critical friend' to those involved in policy, plan and programme (PPP) formulation and implementation. It aims at making strategic decisions above the project level more transparent, accountable and ultimately more environmentally sustainable. In this context, it does not simply assess impacts of proposed action (i.e. of a proposed policy, plan or programme) in a reactive manner. Rather, it aims at steering thinking of those involved in policy, plan and programme making with regards to alternative actions for achieving overall economic, social, and other environmental aims. It investigates ways to avoid, reduce or otherwise mitigate negative impacts while enhancing positive outcomes. The SESA is defined as a systematic and comprehensive process for evaluating the environmental consequences of policies, plans or programmes (PPPs) and their alternatives (NEMA, 2012).



The SESA is usually undertaken in order to assess the sustainability of development policies, plans and programmes from which a wide range of development projects usually emerge. It is therefore a very broad test both in terms of space and time which is expected to ensure that all the strategic development interventions in a country are environmentally sustainable without which they can have far reaching implications on the state of environment in terms of the spatial extent of impacts and also in terms of the period of impact. Most policies, for example, usually cover the entire country and will be active for many years. **Figure 1-9** shows the linkages between the SESA, EIA and environmental audit.

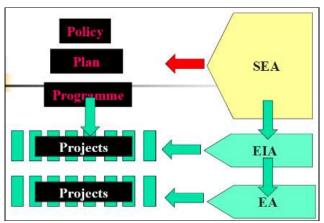


Figure 1- 9: The linkages between SESA, EIA and environmental audits

Accordingly, the aim of a policy SESA like the one considered in this report is to ensure that the existing or any new policies in a given sector are environmentally sustainable. The major purpose of undertaking a policy SESAs is based on the realization that not all policies, legal frameworks, regulations and guidelines for the governance of various development sectors will always be formulated in a sustainable manner. Some of them might be environmentally unsustainable in terms of compliance with existing environmental policies and international obligations and can therefore become a source of continuous strain on the biophysical environment and as well as the social environment including violating their human rights.

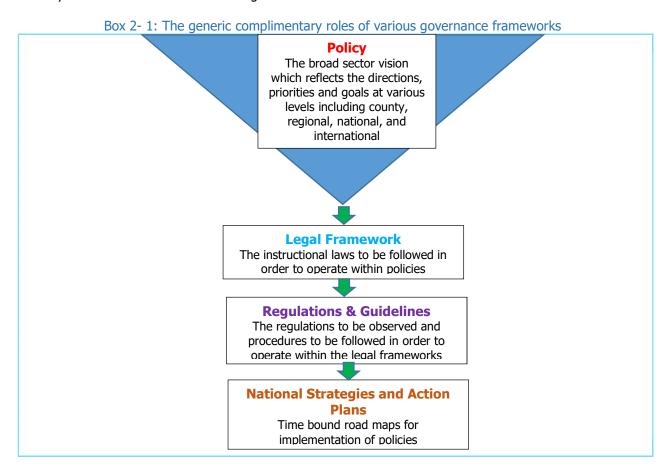
The mining sector in Kenya like in other countries is usually associated with a wide range of environmental risks especially with regard to landscape modification, tailings disposal and atmospheric emissions which is likely to affect valued resources such as land, water, air, biodiversity and ecosystems in a negative way. In addition, the mining sector in many countries can be associated with inequitable sharing of mineral related revenue, lack of transparency and accountability in mining operations and disregard for human rights. Some of these challenges are related with inability of sector policy, legal and regulatory prescriptions to integrate the national environmental and human right obligations in an appropriate manner. In order to avoid this long-term problem, the mining sector requires SESA in order to ensure that all the newly introduced governance frameworks especially the Mining and Minerals Policy 2016, Mining Act (2016) and the mining regulations are environmental sustainable and human rights conscious.

The United Nations Development Programme (UNDP) in collaboration the Swedish Environmental Protection Agency (SEPA) initiated a four-year programme funded by SIDA (Swedish International Development Corporation Agency) in an effort to integrate environmental and social concerns into the broad realm of sustainable policy making in the mining sector. The programme will provide targeted support to four countries, namely Colombia, Kenya, Mongolia, and Mozambique and is expected to strengthen environmental public administration, human rights and the rule of law. It is particularly aimed at strengthening gender, human rights and the rule of law in the mining sectors. The SESA for the mining sector governance framework in Kenya was funded and supported by this programme.



2. GOVERNANCE FRAMEWORKS FOR MINING SECTOR, ENVIRONMENT AND HUMAN RIGHTS IN THE KENYA

The mining sector in Kenya like other development sectors in the country is governed and managed through the use of a package of instruments which include policies, legal frameworks, regulations, guidelines, national strategies and action plans. **Box-2-1** highlights the complimentary roles of the various governance frameworks and shows that the policy is the most superior and foundational governance instrument in any sector. A policy usually outlines what a government ministry hopes to achieve in a certain development sector including the guiding principles to be used to achieve them. The policy also states the principal goals of the government in a given sector. A policy document is therefore not a law but rather, it will often identify the laws needed to achieve its goals.



A policy usually sets out goals and targets of a ministry, department or lead agency but will usually require a law or several laws to enable it achieve its aims. Laws are often guided by current government policy but must be flexible for implementation with change in government while maintaining fidelity to the Constitution. Thus, laws are binding instruments with clearly set out terms and conditions, standards, procedures and principles that must be followed in order to operate within policy. If a law is not followed, there will often be consequences to those failing to follow the law, either through administrative actions, or through criminal prosecution – depending on the provisions made by the specific law on how to deal with non-compliance. In most cases, laws require for development and approval of subsidiary legislation, such as through regulations, or provision for gazettement of various administrative actions in order to clearly provide further interpretation through administrative procedures to be followed by implementing public agencies in a given sector. In most countries, government agencies also develop clear guidelines to be followed by development sectors in order to ensure adherence with various laws and regulations. Finally, many governments often prepare a wide range of national strategies and action plans to support implementation of policies. For instance, the 2010 National Climate Change Response Strategy and the



National Climate Change Action Plan (2013-2017) were prepared in Kenya to support the implementation of the National Climate Change Framework Policy (2014). Quite uniquely, the Sessional Paper No. 3 of 2014, is both the National Policy, and Action Plan on Human Rights, in Kenya.

2.1: Governance Framework in the Mining Sector

The overall governance in the mining sector in Kenya is undertaken using a framework consisting of 18 instruments which include; policy, legal frameworks, regulations and guidelines. This typology of frameworks is generic and common in all development sectors as explained above. **Table 2-1** highlights the specific roles of each of the 18 governance instruments for the mining sector in Kenya including their institutional frameworks.

Table 2- 1: Governance framework for the mining sector in Kenya

Framework Role Designated				
		Role	Designated focal institutions agencies	&
Pol	Policy			
1.	Mining and Minerals Policy, 2016	The policy provides a firm foundation and basis for establishment of an enabling framework for accelerated and sustainable development of the country's mining and mineral resources sector. The policy is expected to ensure that benefits from the sector are shared equitably by stakeholders, including investors, local artisanal and small-scale miners, national and county governments, local communities and the people of Kenya	Ministry of Mining	
Leg	gal framework			
1.	Mining Act, No. 2 of 2016	The Act of Parliament is intended to give effect to Articles 60, 62, (1) (f), 66 (2), 69 and 71 of the Constitution of Kenya regarding land and environment including minerals. It provides the terms and conditions for prospecting, mining, processing, refining, treatment, transport and any dealings in minerals	Ministry of Mining	
2.	Local Content Bill, 2016	The Bill provides a framework to facilitate local ownership, control and financing of activities connected with the exploitation of gas, oil, and other mineral resources. It is also intended to provide a framework to increase the local value capture along the value chain in the exploration of gas, oil and other mineral resources	Ministry of Mining Ministry of Energy & Petroleum	
Re	gulations			
1.	Mining (Local Equity Participation) Regulations, 2012 (LN No. 118)	The regulations require that the mineral right in respect of which mining license is issued shall have a component of local equity participation amounting to at least thirty-five per cent (35%) of the mineral right	Ministry of Mining	
2.	Mining (Use of Assets) Regulations, 2016 (LN No. 80)	The purpose of the regulations is to ensure regular audit of all movable and immovable assets in mining activities	Ministry of Mining	
3.	Mining (Use of Local Goods and Services) Regulations, 2016 (LN No. 81)	 The purpose of these regulations is to:- promote job creation through the use of local expertise, goods and services, businesses and financing in the mining industry value chain and their retention in the country create mining and mineral related supportive industries that will provide jobs and sustain economic development achieve and maintain a degree of participation for Kenyans or companies incorporated in Kenya for the local supply of goods and the provision of services provide for a robust, transparent monitoring and reporting system 	Ministry of Mining	
4.	Mining (Employment and Training) Regulations, 2017 (LN No. 82)	The purpose of the regulations is to:- a) promote job creation through the use of local expertise in the mining industry and across the entire mining value chain and retain the skills within the country;	Ministry of Mining	



		 b) develop local capacities in the mining industry value chain through education, skills and technology transfer, research and development; c) achieve the minimum local employment level and in-country across the entire mining industry value chain; d) provide for the submission of the Employment and Training Plan in the mining industry which should include: a recruitment and training programme; and the supervision, implementation and monitoring schedule of holders of mineral rights to ensure that Kenyan nationals are employed and properly trained 	
5.	Mining (State Participation) Regulations, 2016 (LN No. 84)	The purpose of these regulations is to provide for State participation in prospecting or mining operations carried out by the holder of a mineral right	Ministry of Mining
6.	Mining (License & Permit) Regulations, 2016 (LN No. 87)	The purpose of these regulations is to regulate the licensing and permitting of mineral rights and dealing permits in accordance with the Mining Act, 2016	Ministry of Mining
7.	Mining (Dealings in Minerals) Regulations, 2016 (LN No. 88)	The purpose of the regulations is to give effect to section 223(1) of the Mining Act (2016) in so far as it relates to dealings in minerals by providing for the scope and procedures to be followed by a person who requires a mining license or permit including the renewal and revocation of such licenses and permits	Ministry of Mining
8.	Mining (Community Development Agreement) Regulations, 2017 (LN No. 148)	The purpose of the regulations are to:- (1) provide a legal basis on which mining operations and mining- related activities are conducted throughout the entire life cycle of the mine in order to ensure that: a) benefits of the mining operations or activities are shared between the holder and affected community; b) mining operations are consistent with the continuing economic, social and cultural viability of the community; and c) mining operations significantly contribute to the improved economic, cultural, and social welfare of the community; (2) ensure accountability and transparency in mining related community development; (3) define when Community Development Agreements (CDAs) are required and provide a framework for such agreements	Ministry of Mining
9.	Mining (Strategic Minerals) Regulations, 2016 (LN No. 149)	The purpose of the regulations is to provide clarity on the process through which strategic minerals are identified, declared as strategic and regulated based on a transparent and consultative process that includes technical review and expert consideration. Strategic minerals apply to all radioactive minerals	Ministry of Mining
10.	Mining (National Mining Corporation) Regulations, 2017 (LN No. 150)	The purpose of the regulations is the establishment of the National Mining Corporation as the investment arm of the national government in respect of minerals	Ministry of Mining
11.	Mining (Mine Support Services) Regulations, 2016 (LN No. 151)	The purpose of the regulations is to provide the scope and procedures to be followed by a person who requires a mine support service license including the renewal and revocation of such licenses	Ministry of Mining
	Mining (Reporting of Mining and Mineral Related Activities) Regulations, 2017 (LN No. 152)	The purpose of the regulations is to provide directions on the submission of relevant reports on mining activities by mining companies	Ministry of Mining
13.	Mining (Award of Mineral Rights by Tender) Regulations, 2016 (LN No. 153)	The regulations are associated with award of mineral rights in order to ensure free and fair, open-market competition which encourages investment in the mining sector	Ministry of Mining



14. Draft Mining (Royalty) Regulations, 2017	The mineral royalty regulations apply to holders of mineral rights, dealers' licenses or permits under the Act and the former Act (Mining Act, 1940)	Ministry of Mining
Guidelines		
Mining (Work Programmes and Exploration Reports) Guidelines, 2017 (LN No. 85)	The purpose of the regulations is to give effect to sections 223(1) and 221(1) of the Mining Act (2016) in so far as they relate to guidelines for work programmes and exploration reports. It provides guidance to applicants for, and holders of, reconnaissance, prospecting and retention licences on how to prepare and submit compliant work programmes and exploration reports	Ministry of Mining

The analysis of the above frameworks during the SESA process was undertaken in order to identify the specific governance prescriptions for the mining sector in Kenya. These prescriptions were the subject of comprehensive PPP analysis in which they were subjected to detailed interrogation against the national obligations for environmental sustainability and protection of human rights. The identification of the specific governance prescriptions in the above instruments are presented below.

2.1.1: Policy

The Government of Kenya formulated the Mining and Minerals Policy (2016) to enable the country obtain maximum benefits from its mineral deposits after operating without a clear policy for many years since the colonial times. Previously, the mining sector was mainly governed on the basis of the Mining Act Cap. 306, a legal framework enacted way back in 1940. The objectives of the Mining and Minerals Policy (2016) are to provide: -

- Long term policy direction and legal framework which conform to current industry needs, trends and international best practices.
- A strategy for clear, simple, predictable, transparent and accountable licensing procedures in the mining and mineral resources sector including access to land.
- A strategy for marketing, promotion and value addition of minerals.
- A framework for a well-structured and globally competitive fiscal regime.
- A framework for mobilizing resources and capacity building for the sector.
- A framework for harmonizing legislations relating to mining, health and occupational safety and the environment.
- A framework for gender mainstreaming and eradication of child labour in the mining industry.
- A framework for mainstreaming activities of artisanal and small-scale miners.
- A framework to promote and facilitate local participation and investment in mining ventures.
- A framework for equitable sharing of mineral benefits between the national government, county governments and the communities inhabiting areas where mining takes place.
- A framework to enhance acquisition, processing and dissemination of geological and mineral data and information to investors and other key stakeholders including the public.

The Mining and Minerals Policy (2016) comprehensively addresses the gaps that have existed in the mining sector and aligns them with the aspirations of Kenya Vision 2030, the provisions of the Constitution of Kenya (2010) and the African Union Mining Vision (2009). The African Union Mining Vision policy aims at positioning mining as a key driver of Africa's socio-economic development. In addition to the mining policy, there are other policies in Kenya, which directly impact the mining sector and therefore form part of the mining governance framework. The specific policy prescriptions in this policies in relation to environmental management and human rights are highlighted in **Table 2-2**.



Table 2- 2: Environmental and human rights prescriptions in the mining policy

Policy Mining and Minerals Policy, 2016

Relevant prescriptions

- 3.2. Guiding principles
 - i. Inter-generational equity and sustainable utilization of mineral resources
 - ii. Integrating sound environmental protection, safety and health considerations in mineral resources development
 - iii. Equitable access to mineral resources and benefit sharing
 - iv. Transparency, accountability, and public participation
 - v. Respect of socio-cultural values, access to justice, gender equality and inclusiveness
 - vi. Value addition and development of horizontal and vertical linkages to the local economy

Policy objectives are to provide a framework for:-

- harmonizing mining, health and occupational safety and environmental legislations
- gender mainstreaming and eradication of child labour in mining industry
- mainstreaming activities of artisanal and small-scale miners
- local participation in the mining investment ventures
- equitable sharing of mineral benefits between the National Government, County governments and local community

Policy strategies are to:-

Strategy 4: Develop legislative mechanisms for accessing land for mineral development **Strategy 5**: Achieve an acceptable balance between mining and environmental conservation and ensure that the sector operates within the approved (national and where necessary international) standards of health, safety, human rights and environmental protection

Strategy 8: Pursue a responsive regulatory framework that ensures that benefits accruing from the mining sector are maximized for greater socio-economic development

Strategy 9: Design mechanisms for sharing benefits accruing from exploitation of minerals between the National Government, the County Governments and Local Communities

Strategy 10: Develop and implement mechanisms to enhance participation of Government (National & County), affected communities and other stakeholders in mining investments

Strategy 11: Develop a framework for mainstreaming and formalizing artisanal and small-scale mining operations in order to support livelihoods and entrepreneurship

Strategy 12: Develop and implement frameworks, structures and mechanisms that ensure equitable participation, ownership and decision-making in mining value chains by women, youth, and disadvantaged groups

Chapter four: Institutional framework – establishment of directorates with clear mandates as follows:-

- 1. Directorate of Mines
 - Arbitration of mining disputes
 - Mine health, safety and environment
- 2. Directorate of Geological Surveys
 - Evaluating and monitoring hazards associated with earthquakes, landslides, toxic minerals, subsidence and other ground failures
- 3. Directorate of Resource Surveys and Remote Sensing
 - Land use land cover mapping
 - Data generation for sustainable conservation; and
 - Mapping of land degradation

The specific environmental and human rights considerations in the Mining and Minerals Policy (2016) are summarized in **Table 2-3**.



Table 2- 3: Summary of the environmental obligations considered in the Mining and Minerals Policy (2016)

Impact dimension	Relevant statutes in Mining and Minerals Policy (2016)
Physical environment	Mining hazard monitoring and managementLand degradation mapping and management
Biological environment	Nil
Social environment	 Inter-generational equity and sustainable utilization of mineral resources Mineral value addition Equitable benefit sharing Transparency, accountability and public participation Stakeholder engagement Gender equality and inclusiveness Involvement of youth and disadvantaged groups Occupational safety and health Arbitration of mining disputes
Human rights	Eradication of child labour
Environmental protection	Environmental protection, safety and health
Environmental rehabilitation and restoration	Nil

2.1.2: Legal frameworks

The mining sector in Kenya is principally governed by the Mining Act (2016), whose purpose is to; a) give effect to Article 60, 62(1(f), 66(2) and 69 of the Constitution of Kenya, and b) provide for prospecting, mining, processing and dealings in minerals. Previously, the mining sector was governed on the basis of the Mining Act Cap. 306 of 1940 which meant the industry was operating within an archaic legal framework that was largely out of touch with the constitution and current international best practices. The new mining law seeks to guide mineral resources wealth exploitation, overall sector governance including environmental sustainability. It seeks to address key gaps in the Mining Act of 1940, and align the sector to the latest global trends on value-addition and use of modern approaches in order to spur investor interest. In addition to the Mining Act (2016), there are other legal frameworks whose roles is to support governance in the mining sector, especially with regard to investment promotion, fair employment, occupational safety and health, physical planning, and HIV/AIDs prevention and control among others. The specific prescriptions, from these legal frameworks, in relation to environmental management and human rights are highlighted in **Table 2-4**.

Table 2- 4: Environmental and human rights prescriptions in the mining law

	rable 2- 4. Litvironinental and numan rights prescriptions in the mining law
Legal frameworks	Prescriptions
Mining Act, No. 2 of 2016	20(1) Responsibilities for the Director of Mines:— (i) facilitating access to information by the public (n) promoting co-operation among state agencies, county governments, the private sector, reSESArch bodies, non-governmental organizations and other organizations which are engaged in mining activities (o) advising on ways of ensuring that mining operations take into account local and community values 3) ensuring the health and safety of persons employed by a holder of a mineral right 21(1) Responsibilities for the Director of Geological Survey:—



Prescriptions

- (c) undertaking geological, geophysical, geochemical, seismological and hydro-geological surveys, investigations and mapping aimed at defining the character and distribution of rocks and superficial deposits and determining the mineral potential
- (d) conducting geo-environmental studies; monitoring of seismic processes and mapping of potential geo-hazards
- (f) conducting geological analysis and valuations
- (g) developing a national repository of geo-science information and facilitating access to this information by the general public
- (i) undertaking audits of mineral right holders
- 36(2) Responsibilities for the Mineral Rights Board including mining approvals through:-
- (a) National Land Commission, in relation to public land;
- (b) Relevant State agency where that mineral right is on public land
- (c) Appropriate Cabinet Secretary or other authority, where the area in respect of which a mineral right is in a place of burial, or an area of religious significance, a public building, or for any other public purpose;
- (e) Cabinet Secretary responsible for matters relating to wildlife conservation and management, where the mining land is situated within a marine park, a national park or a local sanctuary under the Wildlife Act
- (f) Cabinet Secretary responsible for matters relating to the environment, where the mining land is situated within a protected area, a protected natural environment, or a protected coastal zone under the Environmental Management and Coordination Act;
- (g) Director of the Kenya Forest Service (KFS), where the mining land is situated within forest area or; operations on, under or over an area, that has been declared a forest area under the Forests Act;
- 42. (1) Conditions before the granting of mineral right:—
- (a) the protection of the environment
- (c) community development
- (d) safety of prospecting and mining operations
- (e) health and safety of persons undertaking those operations
- (f) the protection of the lawful interests of the holders of any other mineral right
- 43. Improper mining practice
- (1)(a) engage in wasteful mining or treatment practices
- 46.(1) Skills transfer to and capacity building for the citizens of Kenya through recruitment and training:-
- (3) Replacement of expatriates, the number of years such expatriates shall serve and provide for collaboration and linkage with universities and reSESArch institutions to train citizens
- 47. (1) Employment preference to members of the community and citizens of Kenya.
- (2) In the case of a large-scale operation, the holder of a mineral right shall:
- (a) conduct training programmes for the benefit of employees
- (b) undertake capacity building for the employees
- (c) only engage non-citizen technical experts in accordance with such local standards for registration as may be prescribed in the relevant law
- (d) work towards replacing technical non-citizen employees with Kenyans
- (e) provide a linkage with the universities for purposes of reSESArch and environmental management
- (f) facilitate and carry out social responsible investment for the local communities; and
- (g) Implement a community development agreement.
- 50. Preference for local products.

The holder of a mineral right shall, in the conduct of prospecting, mining, processing, refining and treatment operations, transport or any other dealings in minerals give preference to the maximum extent possible:

(a) to materials and products made in Kenya



Prescriptions

- (b) to services offered by members of the community and Kenyan citizens; and
- (c) to companies or businesses owned by Kenyan citizens
- 61 (3) Conditions for the granting of reconnaissance license by the Cabinet Secretary, on the recommendation of the Mineral Rights Board:
- (c) the local product plan by the applicant with respect to the procurement of locally available goods and services is acceptable; and
- (d) the local employment plan by the applicant with respect to employment and training of Kenyan citizens is acceptable
- 67. (1) Conditions for valid reconnaissance license holders shall:
- (e) inform and consult on an ongoing basis with the national and county government authorities and communities about the reconnaissance operations that require physical entry onto the land within their jurisdiction
- (f) not enter land that is excluded from the reconnaissance license
- (g) compensate users of land for damages to land and property resulting from reconnaissance operations in the license area
- 72. (2) An applicant for a prospecting license shall provide the following information to the Cabinet Secretary:
- (e) A plan giving particular of the proposals by the applicant with respect to the employment and training of Kenyan citizens; and
- (f) A plan giving particulars of the proposals by the applicant with respect to the procurement of local goods and services
- (3) The Cabinet Secretary shall not grant a prospecting license unless:
- (c) the applicant has submitted an environmental rehabilitation and restoration plan;
- (d) the local product plan by the applicant with respect to the procurement of locally available goods and services are acceptable;
- (e) the employment plan by the applicant with respect to employment and training of Kenyan citizens are acceptable
- 77. (1) The holders of a prospecting license shall
- (d) comply with the terms and conditions of the environmental rehabilitation and restoration plan
- 78. A prospecting license information issued in accordance with this Act shall include the following information an approved:-
- (a) programme for prospecting operations, including expenditure estimates;
- (b) plan for the procurement of local goods and services;
- (c) plan to employ and train citizens of Kenya;
- (d) an environmental impact assessment (EIA) report, a social heritage impact assessment and EMP, where required.
- 89. The holder of a retention license shall-
- (b) back fill or otherwise make safe in the prescribed manner, or as otherwise directed by the Cabinet Secretary any excavations made during the course of prospecting operations
- (c) permanently preserve, or otherwise make safe in the prescribed manner or as otherwise directed by the Cabinet Secretary, any boreholes made during the course of prospecting operations
- (d) comply with the terms and conditions of the environmental restoration, rehabilitation and heritage restoration plan
- (e) remove any equipment, plant or building erected for prospecting operations in the area specified in the license;

Artisanal mining operations

- 93. Establishment of offices in the county to:
- 3 (b) compile a register of the artisanal miners
- (c) supervise and monitor the operation and activities of artisanal miners
- (d) advise and provide training facilities and assistance necessary for effective and efficient artisanal mining operations
- (f) facilitate the formation of artisanal association groups or cooperatives; and
- (g) promote fair trade for artisanal miners



Prescriptions

- 101(2) Information requirement in the application for a mining license under:
- (g) a plan giving particulars of the applicant's proposals with respect to the employment and training of Kenyan citizens
- (h) a plan giving particulars of the applicant's proposals with respect to the procurement of local goods and services
- (i) proof of submission and approval of an environmental and social impact assessment (EIA) report and environmental management plan; and
- (j) a plan giving particulars of the applicant's proposals with respect to social responsible investments for the local community
- 103. Conditions for granting a mining license:-
- (c) the applicant has obtained an approved EIA license, a social heritage assessment plan and EMP;
- (d) proposal for procurement of local goods and services;
- (e) proposal with respect to employment and training of Kenyan citizens;
- (f) project feasibility study;
- (g) proposal with respect to engaging in community investments is socially responsible
- 106. Required mining license information:—
- (f) approved plan for the procurement of local goods and services;
- (h) approved plan to employ and train citizens;
- (i) approved EIA report, social heritage impact assessment and environmental management plan;
- 109. Compliances for mining license holders:-
- (b) approved programme for mining operations;
- (c) terms and conditions of the approved EIA license, social heritage assessment plan and EMP;
- (d) demarcation of mining areas;
- (g) stacking or dumping of any mineral or waste products in the manner provided for in the license;
- (i) community development agreement (CDA).
- 110(1) complete and accurate record of the mining operations including:-
- (2)(1) copies of all maps, geological reports, sample analysis, aerial photographs, cores, logs and tests and other data obtained and compiled by the license holder;
- 115. Information required for application for the renewal of a mining license:-
- (c) approved EIA license, social heritage assessment plan, EMP and Community Development Agreement;

Part V - Mineral agreements

- 117(2) Terms and conditions for mineral agreements:-
- (d) environmental obligations and liabilities, subject to the requirement of the EMCA Cap 387;
- (j) community development plans.
- 119. (1) Subject to Article 35 of the Constitution and any other written law, all mineral agreements shall be public and be made accessible to the public
- 128 Conditions for allocation of mineral rights in community land
- (1) Consent requirement for reconnaissance license or permit and prospecting license from:-
- (a) the authority obligated by the law relating to administration and management of community land to administer community land; or
- (b) The county government in relation to the community land that is un-alienated.
- (2) Consent shall be deemed to have been be given for the purposes of this Act where the registered community land representatives have:—
- (a) entered into a legally binding arrangement with the applicant for the mineral rights or with the Government, which allows the conduct of mining operations; or
- (b) entered into an agreement with the applicant for the mineral right concerning the payment of adequate compensation.
- 133. Terms and conditions for holders of a prospecting permit for protection of the environment;



Prescriptions

- 140 Obligations to mining permit
- (c) demarcation of the mining area;
- (d) protection and restoration of the environment within the mining area;
- (f) stacking or dumping any minerals or building materials or waste products in the manner provided for in the permit;
- (g) not using such equipment as may be prescribed in Regulations or chemicals such as cyanide and mercury.

Part VIII—Surrender, suspension and revocation of mineral rights

- 144 (4) An application made under subsection (2) shall include -
- (b) proof of implementation of any EMPs
- 149. (1) The holder of a mineral right who applies to surrender the right shall furnish the Cabinet Secretary with
- (c) notification of any potentially hazardous substances.

Part IX—Surface rights compensation and disputes

- 152. The owner or lawful occupier or user of an area of land which is the subject of a mineral right shall continue to enjoy the right to graze livestock on the land or to cultivate the land to the extent subject to the following conditions—
- (b) does not, by virtue of those operations, constitute a danger or hazard to livestock or crops;
- (b) causing loss of or damage to buildings and other immovable property;
- (c) causing damage to the water table or deprives the owner of water supply;

153(1) Where the exercise of the rights conferred by a mineral right

- (b) causing loss of or damage to buildings and other immovable property;
- (c) causing damage to the water table or depriving the owner of water supply;
- (d) in the case of land under cultivation or grazing of domesticated animals, causes any loss of earnings
- (e) a demand or claim for compensation may be made to the holder of the mineral right to pay prompt, adequate and fair compensation to the lawful owner, occupier or user of the land in accordance with the provisions of this Act
- (8) The Cabinet Secretary in consultation with the community and the NLC shall ensure that the inhabitants or communities who prefer to be compensated by way of resettlement as a result of being displaced by a proposed mineral operation are settled on suitable alternate land, with due regard to their economic wellbeing, social and cultural values and the resettlement is carried out in accordance with the relevant physical planning law
- 155. Subject to the provisions of this Act, the Cabinet Secretary may inquire into and determine the following matters:
- (a) a dispute of the boundaries of an area held under a prospecting or mining right;
- (c) a claim by any person to be entitled to erect, cut, construct or use any pump, line of pipes, flume, race, drain, dam or reservoir for mining purposes;
- (d) a claim to have any priority of water taken, diverted, used or delivered for mining purposes, as against any other person claiming the same; or
- (e) assessment and payment of compensation where provided for under this Act.

Part XI - Health, safety and environment

- 176 (1) A mineral right or other license or permit granted under this Act shall not exempt a person from complying with any law concerning the protection of the environment.
- (2) A mining license shall not be granted to a person under this Act unless the person has obtained an EIA license, social heritage assessment plan and the EMP has been approved.
- 177. A provision of this Act and any right or entitlement conferred under a mineral right shall not exempt a person from compliance with the provisions of the Water Act, 2016 concerning the right to the use of water from any water resource.
- 187(1) A provision of this Act and a right or entitlement conferred under a mineral right shall not operate to exempt a person from compliance with the provisions of the Occupational Health and Safety Act, 2007 concerning the safety of workers and mine operations.



Legal **Prescriptions** frameworks (2) In addition to provisions in subsection (1), the Cabinet Secretary shall make regulations for safety and health of persons employed in mines, and the carrying on of prospecting or mining operations in safe, proper, sanitary and effectual manner. 179. Conditions for holders of a permit or license to ensure that:-(a) the sustainable use of land through restoration of abandoned mines and guarries; (b) the seepage of toxic waste into streams, rivers, lakes and wetlands is avoided and that disposal any toxic waste is done in the approved areas only; (c) blasting and all works that cause massive vibration is properly carried out and muffled to keep such vibrations and blasts to reasonable and permissible levels in conformity with the EMCA Cap 387; and (d) upon completion of prospecting or mining, the land in question shall be restored to its original status or to an acceptable and reasonable condition as close as possible to its original state. 180. (1) The Cabinet Secretary shall not grant a prospecting license, a retention license or a mining license to an applicant, unless the applicant has submitted a site mitigation and rehabilitation or mine-closure plans for approval. (2) The Cabinet Secretary may prescribe regulations for site rehabilitation and mine-closure obligations. 181. (1) An applicant for a prospecting license, a retention license or a mining license shall provide a bond or some other form of financial security in this section called an environmental protection bond sufficient to cover the costs associated with the implementation of the environmental and rehabilitation obligations. (2) An environmental protection bond required under subsection (1) shall be in a form and for an amount as may be determined by the Cabinet Secretary having regard to the particular characteristics of the project. Part XIV—Monitoring, compliance and enforcement (k) require such changes, as may be necessary in regard to the safety of the operation and protection of employees, to be implemented within a specified time, failing which the license holder will be considered in breach; (I) order the temporary cessation of operations where he considers that the mining or processing activities are so hazardous as to constitute a serious and imminent danger to life; (m) enter into any premises used in or connected with prospecting, mining or mineral processing operations to examine the circumstances surrounding any accidents or incidents affecting the health of employees including the subsequent actions taken by license holder. Part XV—Miscellaneous provisions 221(1) The Cabinet Secretary may publish and disseminate manuals, codes or guidelines relating to large scale and small-scale operations, including in relation to environmental matters. (2) In developing manuals, codes and guidelines for the purposes of subsection (1), the Cabinet Secretary shall ensure that any such publications are consistent with quidelines issued by other Government departments, agencies and authorities. (3) Evidence that a person -(a) has complied with manuals, codes and guidelines may be used to show that the person has complied with his environmental obligations under this or any other Act; and 223(2) Without prejudice to the generality of the foregoing, the Cabinet Secretary may make Regulations prescribing, (h) the measures to be observed to protect and rehabilitate the environment. Local Content Part II – Role of the national and county governments Bill, 2016 6. Obligations for national and county governments 7. establishment of the Local Content Development Committee 20. Local content plan 20(5): (a) employment and skills development plan (b) research and development plan (c) technology transfer plan (i) employment and skills development plan



Legal frameworks	Prescriptions
	(ii) research and development plan;
	(iii) technology transfer plan
	23. Capacity building
	24. Employment and skills development plan
	25. Education and training for nationals
	26. Consideration of employment of local persons
	28. Strategies for transfer of technology
	30. Transfer of technology plan
	40. Preference of local companies
	41. Preference of local goods and services
	43. Thresholds for Kenyan equity stake in operator
	51. Public participation

The specific environmental and human rights considerations in the Mining Act (2016) and Local Content Bill are summarized in **Table 2-5**.

Table 2- 5: Summary of the environmental obligations considered in the Mining Act (2016) and Local Content Bill

Impact	Relevant statutes in Mining Act 2016 and Local Content Bill
dimension Physical environment	 Mapping of potential geo-hazards Prevention of wasteful mining practices Protection of surface water and groundwater resource Mitigation for massive vibration
Biological environment	 Protection of forests Protection of wetlands Protection of protected areas, national parks and sanctuaries
Social environment	 Community development agreements (CDAs) Local employment plan (LEP) Approved plan to employ and train citizens Approved plan for the procurement of local goods and services Skills transfer and Capacity building Replacement of expatriates Employment and training Adequate and fair compensation for land for and property damage Compensation for displacement Proper resettlement Dispute resolution Protection of burial sites Protection of areas of religious significance Health and safety of prospecting and mining operations Health and safety of mining workers Mining accidents or incidents affecting the health of employees Social heritage impact assessment (SHIA) Heritage restoration plans
Human rights Environmental	No environmental obligation • Environmental impact assessment (EIA)
protection	 Environmental management plans (EMPs) Demarcation of mining areas Sustainable stacking or dumping of mineral waste Controlled use of toxic materials such as cyanide and mercury Notification of any potentially hazardous substances Prevention of toxic waste disposal into streams, rivers, lakes and wetlands Environment, health and safety



Impact dimension	Relevant statutes in Mining Act 2016 and Local Content Bill
Environmental rehabilitation and restoration	 Sustainable restoration of closed or abandoned mines and quarries Environmental rehabilitation and restoration plans Environmental protection bonds
Environmental framework referencing	 EMCA Cap 387 Water Act, 2016 Forest Act, 2005 Wildlife Conservation and Management Act, 2013 Occupational Health and Safety Act, 2007

2.1.3: Regulations

The key regulations for the governance of the mining sector has previously been the Mining (Local Equity Participation) Regulations, 2012. However, up to 13 additional mining regulations are under preparation to support the implementation of the Mining and Minerals Policy 2016 and enforcement of the Mining Act 2016. These are:-

- 1. Mining (Use of Assets) Regulations, 2016 (LN No. 80)
- 2. Mining (Use of Local Goods and Services) Regulations, 2016 (LN No. 81)
- 3. Mining (Employment and Training) Regulations, 2017 (LN No. 82)
- 4. Mining (State Participation) Regulations, 2016 (LN No. 84)
- 5. Mining (License & Permit) Regulations, 2016 (LN No. 87)
- 6. Mining (Dealings in Minerals) Regulations, 2016 (LN No. 88)
- 7. Mining (Community Development Agreement) Regulations, 2017 (LN No. 148)
- 8. Mining (Strategic Minerals) Regulations, 2016 (LN No. 149)
- 9. Mining (National Mining Corporation) Regulations, 2017 (LN No. 150)
- 10. Mining (Mine Support Services) Regulations, 2016 (LN No. 151)
- 11. Mining (Reporting of Mining and Mineral Related Activities) Regulations, 2017 (LN No. 152)
- 12. Mining (Award of Mineral Rights by Tender) Regulations, 2016 (LN No. 153)
- 13. Draft Mining (Royalty) Regulations, 2017

The specific legal prescriptions in relation to environmental management and human rights are highlighted in **Table 2-6**.

Table 2- 6: Environmental and human rights prescriptions in the mining regulations

	rable 2- 6: Environmental and numan rights prescriptions in the mining regulations		
Re	gulations	Prescriptions	
1.	Mining (Local Equity Participation) Regulations, 2012 (LN No. 118)	3. Every mining license issued shall have a component of local equity participation amounting to at least thirty-five per cent (35%) of the mineral right.	
2.	Mining (Use of Assets) Regulations, 2016 (LN No. 80)	No relevant E&HR prescription	
3.	Mining (Use of Local Goods and Services) Regulations, 2016 (LN No. 81)	3. The purpose of these regulations is to:- (a) promote job creation through the use of local expertise, goods and services, businesses and financing in the mining industry value chain and their retention in the country; (d) create mining and mineral related supportive industries that will provide jobs and sustain economic development; (e) achieve and maintain a degree of participation for Kenyans or companies incorporated in Kenya for the local supply of goods and the provision of services (f) provide for a robust, transparent monitoring and reporting system; (g) provide a plan for provision of goods and services.	
4.	Mining (Employment and Training) Regulations, 2017 (LN No. 82)	5. (2) Where experienced expatriates are needed, a plan for the progressive replacement of expatriates by Kenyan nationals shall be required.6. (1) Every holder of a large-scale mineral right or a mine support service license shall, within ninety days of the coming into force of these regulations, submit to the Cabinet	



Reg	gulations	Prescriptions
		Secretary a detailed Employment, Training and Succession Plan which corresponds with the work programme or programme of mining operations that accompanied the application made by the holder for the grant of the license. (6) A holder of a mineral right shall comply with the relevant labour, employment, social security laws and any regulations made under such laws of Kenya.
		(7) A holder shall provide to the Director of Mines a half yearly report on the employment and training activities for the reporting period not later than fourteen days after the end of the reporting period.
		7. (1) A holder of a mineral right or mine support service license shall employ only Kenyans in junior level or middle level positions. (2) For the purpose of sub regulation (1), a junior or middle level position includes the position of foreman, supervisor or any other corresponding position or grades designated by the holder.
		9. (1) A holder of a mining license shall, within one (1) year of the commencement of mining operations, submit a programme to the Director of Mines for the promotion of education, research and development in Kenya in relation to its overall activities or operations.
		10. (1) A holder of a mineral right or a mine support service license shall, not later than thirty days of the beginning of each year, submit to the Director of Mines an annual performance report covering all the activities related to employment and training for the year under review.
5.	Mining (State	6. State Right to Free Equity Participation
	Participation)	7. State Right to Participation Interest
	Regulations, 2016 (LN No. 84)	8. State Participation in Prospecting Operations
6.	Mining (License & Permit) Regulations, 2016 (LN No. 87)	8. Online Mining Cadastre (OMC) information management (6) Public access to the Online Mining Cadastre by the Mining Cadastre Office (MCO)
	, ,	16. Charges and fees, obligations and penalties (c)Other payments (vi) Environmental bonds
		20. Environmental and social information in support of applications (2) ESIA Report
		(3) An environmental and social screening (ESS) report shall be required before the commencement of activities under the following mineral rights
		(a) reconnaissance license; (b) prospecting license;
		(c) retention license;
		(d) reconnaissance permit;
		(e) prospecting permit;
		(f) artisanal mining permit
		(4) ESIA, ESMP and ESS reports shall comply with the requirements of the Environmental Management and Coordination Act (EMCA) and any regulations or guidelines.
		22. Areas designated for small-scale mining or artisanal mining (1) The Cabinet Secretary may, by notice in the Kenya Gazette, designate land exclusively for small-scale mining and/or artisanal mining operations.
		37. Boundary disputes
		38. Land surface rights
		39. Consent from land holders to conduct mining operations
		40. Categories of land (1) Restricted or excluded land
		(2) Private land



Regulations	Prescriptions
	(30) Community land 43. Inheritance of artisanal mining rights 44. land compensation guarantee bond 52. Management of assets and hazardous materials on expiry or revocation of mineral right Part VIII – Large scale mining operations Part IX – Small-scale mining operations Part X – Artisanal mining operations Part XI - Schedules
7. Mining (Dealings in Minerals) Regulations, 2016	No relevant E&HR prescriptions
(LN No. 88) 8. Mining (Community Development Agreement) Regulations, 2017 (LN No. 148)	 The objects of these regulations are: (1) to provide a legal basis for ensuring that the entire life cycle of mining operations and mining-related activities is conducted in a manner that ensures the following:
	(f) special programmes that benefit women;(g) special programmes that benefit youth;(h) protection of natural resources;(i) support for cultural heritage and sports;



Regulations	Prescriptions
Regulations	(j) treatment of cultural and sacred sites; (k) treatment of ecological systems, including restoration and enhancement, for traditional activities such as hunting and gathering; (l) how cultural values will be respected; (m) funding and control mechanisms to ensure funds are utilized as intended and are transparent and auditable; (n) special programmes that will benefit persons with disabilities. 10. (1) The holder and the affected mine community shall establish a schedule of consultations to be published in a manner that is acceptable to the affected mine community or any other mode of publication mutually agreed upon by the parties. 11. (1) The content of a Community Development Agreement shall comprise of an explanation of the Community Development Agreement goals, objectives, obligations and activities aimed to achieve sustained community development • description of environmental and social impacts; • description of environmental and social impacts including a gender awareness assessment. 16. (1) The parties shall use best efforts to establish meaningful mechanisms that ensure transparent transactions relevant to Community Development Agreement commitments. 18. Where a mining license is transferred to another holder in accordance with the Mining Act, the transferee shall, in writing, assume all rights and obligations of the transferor under any Community Development Agreement relating to the mining license or transitional mining right. 20. Where a holder of a mining lease or special mining lease has entered into a Community Development Agreement or has started some community development initiative, scheme or social development programme prior to the coming into force of these regulations, the holder shall ensure that such a scheme, initiative, programme, agreement or howsoever described shall be in compliance with the requirements of these regulations within eighteen months after coming into force of these regulations.
9. Mining (Strategic Minerals) Regulations, 2016 (LN No. 149)	 Dispute resolution procedure schedules Submission of request to declare a mineral, minerals or mineral deposit as Strategic Authority to declare a mineral, minerals or mineral deposit as strategic Declaration of Strategic Minerals and Strategic Minerals Deposits Multiple Strategic Minerals Mining of Strategic Minerals Storage and Stockpiling of Strategic Minerals Processing of Strategic Minerals Transport of Strategic Minerals Transport of Strategic Minerals
10. Mining (National Mining Corporation) Regulations, 2017 (LN No. 150)	No relevant E&HR prescriptions
11. Mining (Mine Support Services) Regulations, 2016 (LN No. 151)	 Environmental obligations of mine support services providers A person granted a license under these regulations to provide mine services shall comply with the conditions and obligations of the environmental license or any other authorization that may be issued to the person or any mineral right holder being offered a mine support service. A person contracted by a holder of mining license or permit to provide mine support services shall be liable for the restoration or reclamation of any damage caused to the environment as a result of its operations.
12. Mining (Reporting of Mining and Mineral Related Activities) Regulations, 2017 (LN No. 152)	4. (1) A holder including the National Mining Corporation shall submit to the Cabinet Secretary, not later than the first day of March every year, a report on, (a) gross revenue from the sale of minerals, disaggregated by mineral; (b) total number of persons directly employed by the holder including expatriates if any;



Regulations	Prescriptions
	(c) the identities of beneficial owners of holders of licenses of privately owned reporting companies or persons.
	 6. (1) For each year, the report shall include but not be limited to the following information (h) total land area or blocks held under mineral rights; (i) total area or blocks surrendered during the year; (j) total number of each type of mineral right in force at end of the year; (k) number of mineral agreements entered into during the year; (l) number of mew operating large-scale mines that commenced production during the year; (n) number of operating mines; (o) number of community development agreements entered into during the year; (p) total number of community agreements in force at end of the year; (q) identities of beneficial owners of mineral rights; and (r) any other statistics or information that the Cabinet Secretary may deem necessary. 7. (1) The Cabinet Secretary shall ensure that a comprehensive and detailed report, prepared in accordance with regulations 5 and 6 above, is published annually by way of publication on the official website of the Ministry of Mining.
13. Mining (Award of Mineral Rights by Tender) Regulations, 2016 (LN No. 153)	No relevant environmental and human rights prescriptions
14. Draft Mining (Royalty) Regulations, 2017	Royalty base Royalty rate

The specific environmental and human rights considerations in various management regulations in the mining sector are summarized in **Table 2-7**.

2- 7: Summary of the environmental and human rights obligations in various management regulations in the mining sector

Impact dimension	Relevant statutes in mining various management regulations
Physical environment	No relevant obligation
Biological environment	No relevant obligation
Social environment	 Community consultation and outreach Community Development Agreements (CDAs) as an element of legally required Sustainable Responsible Investment (SRI) under the Mining Act, and regulations Employment of mining affected communities Mining benefits for youth and women Mining benefit for persons with disabilities Equitable benefit sharing Employment, Training and Succession Plans (ETSPs) Alternative livelihoods plans (ALPs) Transparent monitoring and reporting Improved economic, cultural social welfare of the community Education, health or other community service as part of Corporate Social Responsibility (CSR) undertaken to complement statutory requirements Protection of cultural and sacred sites
Human rights	No relevant obligation



Environmental protection	•	Environmental impact assessment (EIA)
Environmental rehabilitation and restoration	•	Mine closure plans (MCPs) Environmental restoration and enhancement Post-mining environmental monitoring

2.1.4: Guidelines

The key guidelines associated with the mining sector are the Guidelines for Work Programmes and Exploration Reports, 2017. The specific legal prescriptions in relation to environmental management and human rights are highlighted outlined in **Table 2-8**.

Table 2- 8: Environmental and human rights prescriptions in the mining guidelines

Table 2- 8: Environmental and human rights prescriptions in the mining guidelines			
Guidelines Prescriptions			
Table 2- 8: Env Guidelines Mining (Work Programmes and Exploration Reports) Guidelines, 2017 (LN No. 85)	Prescriptions These guidelines are to give effect to sections 223(1) and 221(1) of the Mining Act (2016) in so far as they relate to guidelines for work programmes and exploration reports. (2) Work programme for new applications: A work programme submitted in support of a new mineral right application will be assessed in relation to the known geology and mineralization in the area. The proposed work will be expected to take account of all available geological maps and reports (Geological Survey and previous company exploration reports, where these are available), and should build on past results. (4) Work programmes for renewal applications: • The new work programme must make clear how it advances the geological understanding of the area and takes it to the next stage, • In the case of the second renewal of a prospecting license, the work programme and expenditure must cover the entire renewal period applied for (maximum (3) years). This must include plans for a feasibility study, EIA study and all other mine planning investigations necessary for a subsequent mining license application. 7. Confidentiality (2) It should be noted that all environmental and community reports are regarded as non-confidential and are, by definition, open to public scrutiny. Annex E: Checklist for Feasibility Study. Mine closure plan - Financial plan; timetable and implementation; restoration/rehabilitation of land; alternative uses of mined out ground; safety considerations; social impacts; alternative livelinoods plan; removal of plant & machinery; alternative uses (conversion) of infrastructure; post-mining environmental monitoring of mine area (including tailings); contingencies; etc.		
	environmental monitoring of mine area (including tailings); contingencies; etc. ESIA - Full, expert assessment and modelling of effects of mining on the environment and social structures; hazard analysis; mitigation plan; monitoring programme.		
	Annex G: Allowable Exploration Expenses - Environmental activities – includes baseline studies; environmental and social/cultural impact assessments; rehabilitation and mine closure/rehabilitation studies; environmental management and rehabilitation; community consultation and outreach.		

2.1.5: Mining Governance Framework in relation to the African Mining Vision and Kenya Vision 2030

The African Mining Vision (AMV),⁴ adopted in February 2009 recognizes that Africa is the world's top producer of numerous mineral commodities. The continent is a global leader in production and reserve deposits for several key minerals such as gold, diamond, aluminum, cobalt, chromium, manganese,

⁴ African Union, African Mining Vision (Addis Ababa, 2009)



43

vanadium, and phosphate, Consequently, the AMV is a policy tool used to help African governments to better harness their natural resource wealth for socio-economic development. It is a pathway formulated by African nations themselves, through the Africa Union (AU) that puts the continent's long term and broad development objectives at the heart of all policy making concerned with mineral extraction. The AMV sets out how mining can be used to drive continental development and all the AU member nations including Kenya are expected to adopt, domesticate and apply these policy tools. The tools therefore present an opportunity for Kenya to shape the Mining and Minerals Policy, 2016, Mining Act, 2016 as well as the Mining regulations and guidelines in accordance with the ideals of sustainable mining. The key intervention points for the AMV in Kenya, and their integration in the country's mining sector policy and law are outlined in **Table 2-9**.

Table 2- 9: Integration of the Africa Mining Vision (AMV) in Kenya

AMV obligations	Integration into Kenyan mining governance framework
Development of the local resource supplier/inputs sector	 Mining Act 2016, s. 50 – provides a requirement for reference for local products and services The draft Mining (Use of Good and Services) Regulations, 2016 have been drafted to guide implementation of this provision
Development of local requisite human resources and technological capacity through stipulated investments in training and R&D	 Section 46 and 47 provide a requirement for mining license holders to provide preference to citizens of Kenya in employment and training, include a plan on how they will replace expatriate staff. The draft Mining (Employment and Training) Regulations, 2016 have been drafted to guide implementation of these provisions.
Safeguarding transparency and good governance as well as enforce internationally acceptable safety and health standards, environmental and material stewardship, corporate social responsibility, and preferential recruitment of local staff	Section 176-177-178 provide that a license holder must remain in compliance with all the environmental, water and occupational safety and health laws applicable in Kenya.
Public disclosure of royalties paid by mining companies	s.119 of the Mining Act 2016 requires the Cabinet Secretary to ensure access to information by publishing, on the Website of the mining Ministry, details about all mining agreements and their current status. In addition, section 119(3) requires the Cabinet Secretary to make regulations establishment accountable and transparent mechanisms of reporting to the public regarding (i) revenues paid to the government by mineral rights holders, (ii) mineral production volumes reached under each licence or permit.
Declaration of minimum local equity participation requirements for mining license	Mining (Local Equity Participation) Regulations, 2012 (regulation 3) make it a condition of every mining license that the mineral right in respect of which the license is issued shall have a component of local equity participation amounting to at least thirty-five per cent (35%) of the mineral right.
Minority equity participation by the state or community in mining operations	 Section 48 (1&2) of the Mining Act 2016 provide that where a mineral right is for a large scale mining operation and concerning strategic minerals, the State shall acquire ten percent free carried interest in the share Capital of the right in respect of which financial contribution shall not be paid by the State. The Mining (State Participation) Regulations, 2016 have been draft to implement this provision.
Allocating portions of central government mineral revenues to local mining communities, and the management of monies so allocated	Mining Act 2016 in Section 183(5) that royalties paid by the holder of a mineral right will be distributed as follows: • Seventy percent to the National Government • Twenty percent to the County Government; and • Ten percent to the community where the mining operations occur



AMV obligations	Integration into Kenyan mining governance framework
	However, no provision is made to guide how the monies will be delivered to the communities and County governments, or how the funds will be utilized or managed. Special regulations to govern this will be required.
Special arrangements and understandings between mining companies and respective local communities that can significantly promote development of the communities	 Section 109(i) of Mining Act, 2016 obligates a mining license holder to sign a Community Development Agreement (CDA) with the community where mining operations are undertaken. This is limited to large scale mining license holders only (s.4 definition of Community Development Agreement). The Mining (Community Development Regulations), 2017 are expected to guide mining operations with regard to the following: Educational scholarship, apprenticeship, technical training and employment opportunities for the people of the affected mine community; Employment for members from the affected mine communities; Financial or other forms of contributory support for infrastructural development and maintenance such as education, health or other community services, roads, water and power; Assistance with the creation, development and support to small-scale and micro enterprises; Special programmes that benefit women; Special programmes that benefit youth; Agricultural product marketing; Protection of natural resources; Supporting for cultural heritage and sports; Safeguarding of cultural and sacred sites; Treatment of ecological systems, including restoration and enhancement, for traditional activities such as hunting and gathering; and Special programmes that will benefit persons with disabilities.
Adopting legal prescriptions to avoid "Dutch disease"	 Mining Act, 2016 does not make provision for payment of royalties to a special fund as described under the African Mining Vision. However, the Natural Resources (Benefit Sharing) Bill 2014 attempts to make provision for deposit of royalties into a Sovereign Wealth Fund, and further attempts to define how these funds will be distributed. Section 26 of the Natural Resources (Benefit Sharing) Bill 2014 Natural Resources (Benefit Sharing) Bill 2014 provides that 20% of revenue collected from royalties for natural resources (including mining) shall be paid into a Sovereign Wealth Fund established by the National Government. Section 26(2) provides that 60% of this money shall be paid into a component of the fund comprising a futures fund; and 40% into a natural resources fund. It is important to note that the revenue sharing ratios proposed in this Bill are not consistent with the Mining Act, and that it proposes a separate institutional mechanism from those under the Mining Act 2016.
Supporting artisanal and small-scale mining (ASM) and Provide ASM miners with analytical skills and training on sound business management	Section 93(3-d) of the Mining Act, 2016 sets outs functions of the County representative of the Director of Mines to include; providing advice and provide training facilities and assistance necessary for effective and efficient artisanal mining operations. Special ASM regulations can provide further guidance for implementation of this provision.
Enhancing the formalization and the level of organization of ASM miners	The Mining Act, 2016 in Section 95 provides for an optional requirement for an artisanal and small-scale mining license that a person may be a member of an artisanal mining cooperative association or group.
Focus on development of diversified and alternative livelihoods to ASM, to facilitate transitions from artisanal to small-scale mining	No provision is made in this respect in the Mining Act, 2016. However, Community Development Agreements (CDAs) are expected to support local community livelihoods as well as the final mine closure. However, special regulations for ASM can be developed to include this specific concern.



AMV obligations	Integration into Kenyan mining governance framework
Empowering women	Mining Act 2016:- Section 46 and 47 provide a requirement for mining license holders to provide preference to citizens of Kenya in employment and training, including a plan on how they will replace expatriate staff. However, this does not focus directly on empowerment of women, there is need for regulations that can provide further guidance on implementation of this clause, including how to provide affirmative action for women in both training and employment. For this reason, the draft Mining (Employment and Training) Regulations, 2016 can be modified and amended.
Eliminating child labour	Section 10(1) of the Children Act, Cap 141 Laws of Kenya requires protection of every child from economic exploitation and any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development. However, special regulations maybe needed under the Mining Act to provide a governance framework on engagement of children, especially given prevalence of child labour in artisanal and small-scale mining, and to provide special powers for mining inspectors to enforce this rule. However, harmony must be sought with provisions of the Labour Relations Act (2007), and the powers of labour inspectors in this respect.
Addressing environmental and human health issues, including HIV/AIDS and occupational hazards	Section 176-178 of the Mining Act, 2016 provides that a mining license holder must remain in compliance with all the environmental, water and occupational safety and health laws applicable in Kenya.

Sessional Paper No. 10 of 2012 on Kenya Vision 2030 is Kenya's current development plan, intended to trigger socio-economic transformations that will result in middle-income status by the year 2030. Implementation of Vision 2030 commenced in 2008, and is undertaken in five-year Medium-Term Plans (MTP). The first was the 2008-2012 MTP, which was followed by the 2013-2017 MTP, and in 2017, the government is developing the next 2018-2022 MTP. Vision 2030 is clear that Kenya will intensify exploration of new minerals, but also develop an environmentally-friendly mining policy. The Kenya Vision 2030, and the 2013-2017 MTP established the priorities to be pursued by Kenya in reviewing or re-establishment of the mining governance framework as illustrated in **Table 2-10**.

Table 2-10: Integration of Kenya Vision 2030 in the mining sector

Kenya Vision 2030 MTP (2013-2017) obligations	Integration into Kenyan mining governance framework
Develop a national mining policy, legal, regulatory and institutional framework	 Mining and Minerals Policy adopted in 2016 Mining Act enacted in 2016 Mining regulations gazetted in 2017 Some of the directorates identified in Mining Act – as part of the administrative structure – need to be established by the Public Service Commission Mineral Rights Board inaugurated
Develop a single fiscal regime for mining	Mining Act, Part XI sets out the financial provisions governing the mining sector in Kenya. This includes details on levying of fees and charges; levying of royalties; regulating the transfer of mineral rights; and application of the 2006 uniform transfer pricing rules developed under the Income Tax Act.
Participation in the Extractive Industry Transparency Initiative (EITI)	Kenya is not a member of the EITI family of nations but the Ministry of Mining has made a public commitment to EITI. No significant legal or policy steps have been taken by the government to embrace this initiative
Establish a National Mining Corporation	Created under the Mining Act, 2016



2.2: Governance Framework in Environment

Environmental governance in Kenya is undertaken through use of a wide range of policies, legal frameworks and regulations. The Constitution of Kenya, at the apex of the legal framework, is the supreme law of Kenya that governs environmental, as well as land management. The Constitution provides the right to a clean and healthy environment, and requires the State, in article 69(1) to take legislative and other measures to protect the environment, including ensuring sustainable utilization of resources for the benefit of the people of Kenya; encouraging public participation in environmental management; establishing system of environmental impact assessment, audit and monitoring; and eliminating environmentally harmful processes. The Constitution, further, through Chapter 5 makes extensive provision for the governance of land in Kenya, with emphasis on sustainable management of land, and establishment of the power of the State (art.66) to control the use of any land for various purposes, including land use planning.

In order to implement the Constitution, the country has developed several guidelines to be observed and standards to be adhered to in all sectors including the mining sector in order to ensure environmental sustainability. The country has also adopted several national strategies and action plans towards this goal. All the outlined or existing environmental governance instruments are also configured in accordance with the various multilateral environmental agreements (MEAs) which the country has ratified.

2.2.1: Policy

The mining sector is expected to operate within the spirit of the various environmental policies by integrating their obligations in the sectoral governance frameworks in order to ensure environmental sustainability. **Table 2-11** shows the environmental policies in Kenya, their roles and institutional framework.

Table 2- 11: Environmental policies in Kenya

Na	tional Constitution	Environmental role	Focal institutions & agencies
1.	The Constitution of Kenya (GoK 2010c)	The Constitution of Kenya is the supreme framework in the Republic of Kenya with Chapter 5 providing the most supreme directions for dealing with land and environment issues	Government of Kenya
N	lational policy		
2.	Sessional Paper No. 10 of 2014 on the National Environment Policy	The policy is expected to provide the guidelines which serve as a framework for environmental governance in the country	 Ministry of Environment and Natural Resources State Department of Environment and Natural Resources
3.	National Land Policy (2009) (GoK, 2009d)	The National Land Policy (NLP) is the document expected to guide the country towards a sustainable and equitable use of land	 Ministry of Lands and Physical Planning State Department of Land National land Commission
4.	Draft National Land use Policy 2016 (GoK 2016)	The aim of the policy is to ensure a balance between different, yet related interests in land utilization such as concerns such as food security, human settlements, environmental protection and climate change; and other economic pursuits	 Ministry of Lands and Physical Planning State Department of Physical Planning
5.	National Water Policy (2012 Draft) (GoK, 2012f)	The objective of the National Water Policy is to take cognizance of the existing water resources situation in the country and provide direction for action in a unified national perspective	Ministry of Water & Irrigation
6.	National Oceans & Fisheries Policy, 2008 (GoK, 2008c)	The overall aim of the policy is to guide the sustainable development of the fisheries sector including the protection of fishing environments including the ocean	 Ministry of Agriculture Livestock and Fisheries



National Constitution	Environmental role	Focal institutions & agencies
		Department of Fisheries
7. Sessional Paper No.1 of 1999 on National Policy on Water Resources Management and Development	The policy provides directions for effective water resource management as key to both basic human needs and sustainable economic development	Ministry of Water & Irrigation
8. Draft National Policy for the Sustainable Development of Arid and Semi-Arid Lands of Kenya (2015) (GoK, 2015a)	The policy provides a strong foundation for the sustainable development of the ASALs. It acknowledges and responds to the specific ecological, social, economic and political realities in the ASALs that distinguish them from the rest of Kenya. The policy aims at providing livelihood security for all people through sustainable natural resource management, and a mission to ensure coordinated, efficient and effective management of natural resources through community Capacity building, participatory planning and decision making	Ministry of Devolution and Planning
9. National Policy on Wetlands Conservation and Management (2013) (GoK, 2013)	The goal of the policy is to ensure wise use and sustainable management of wetlands in order to enhance sustenance of the ecological and socio-economic functions of Kenya's wetlands for the benefit of present and future generations. The policy is based on the principles and values of, among others, wise use, precautionary principle, public participation, devolution and ecosystem based management, taking cognizance of the national and international cooperation	 Ministry of Environment and Natural Resources State Department of Environment and Natural Resources
10. Sessional Paper of 2014 on National Climate Change Framework Policy	The policy was developed in order to facilitate a coordinated, coherent and effective response to the local, national and global challenges and opportunities that climate change presents. The policy aims to enhance adaptive Capacity and build resilience to climate variability and change, while promoting low carbon development pathways	 Ministry of Environment and Natural Resources State Department of Environment and Natural Resources
11. National Wildlife Conservation and Management Policy, 2012 (GoK, 2012)	The aim of the policy is to create an enabling environment for the conservation in perpetuity, Kenya's rich diversity of species, habitats and ecosystems for the wellbeing of its people and the global community in accordance with the Constitution	 Ministry of Environment and Natural Resources State Department of Environment and Natural Resources
12. Draft National Forest Policy 2015 (GoK 2015b)	The policy provides a framework for improved forest governance, resource allocation, partnerships and collaboration with the state and non-state actors to enable the sector contribute in meeting the country's growth and poverty alleviation goals within a sustainable environment	 Ministry of Environment and Natural Resources State Department of Environment and Natural Resources
13. National Policy for Disaster Management, 2009 (GoK, 2009e)	The thrust of the policy is to institutionalize disaster management and mainstream disaster risk reduction in the country's development initiatives. The policy focus is in keeping with international and regional initiatives as contained in the Yokohama Strategy and Plan of Action for a Safer World (1994), the Johannesburg Plan of Implementation issued at the World Summit on Sustainable Development (2002) and the targets set to achieve the Sustainable Development Goals (SDGs), the Hyogo Declaration and Hyogo Framework of Action 2005—	 Ministry of Devolution and Planning County Government Disaster Management Authorities



		Focal institutions &
National Constitution	Environmental role 2015, and finally the Sendai Framework for Disaster Risk	agencies
	Reduction (2015-2030)	
14. National Gender and Development Policy, 2000 (GoK, 2000)	The policy spells out a policy approach of gender mainstreaming and empowerment of women and clearly states that it is the right of women, men, girls and boys to participate in and benefit equally from the development process. The NGDP provides a framework for mainstreaming gender in all policies, planning and programming in Kenya and puts in place institutional mechanisms to ensure effective implementation	Ministry of Devolution and Planning
15. National Environmental Sanitation and Hygiene Policy 2016-2030	The policy commits the Government of the Republic of Kenya at both national and county levels to pursuing a robust strategy that will not only enable all Kenyans to enjoy their right to highest attainable standards of sanitation but also to a clean and healthy environment as guaranteed by the Constitution of Kenya 2010. The policy therefore focuses on a range of complementary strategies devoted to ensuring universal access to improved sanitation and clean and healthy environment. Ultimately, this policy aims at ensuring better health, dignity, social well-being and quality of life for all the people of Kenya	Ministry of Health
16. Draft National Policy on Peace Building and Conflict Management (2006) (GoK, 2006a)	The overall goal of the National Policy on Peace-building and Conflict Management is to promote sustainable peace and development in Kenya. It is intended to address the key challenges facing Kenya in her commitment to supporting sustainable peace and development through the reduction of poverty. It is expected to ensure that Kenya complies with her international and regional obligations under various international agreements relating to human security, conflict, development and human rights. The policy reflects on the values of the Kenyan people as embodied in the Bill of Rights of the Constitution of Kenya, which guarantees the fundamental rights, and freedoms of individual persons	Ministry of Devolution and Planning
17. Draft Devolution Policy, 2015 (GoKc)	The overall goal of the policy is to address the emerging issues on the implementation of devolution and to provide policy measures to enhance effective governance at both the national and county levels of government	Ministry of Devolution and Planning
18. National Policy on Occupational Safety and Health, 2012	The policy applies to all workplaces in all sectors and is expected to promote basic principles of assessing occupational risks and/or hazards; combating hazards at source; and developing a national preventative safety and health culture that includes information, consultation, research and training. The main purpose for the policy is prevention and control of work-related accidents and diseases, compensation and rehabilitation of workers injured in the course of work and those who contract occupational diseases	Ministry of Labour
19. National HIV/AIDs Policy (GoK, 2009)	The policy provides directions for dealing with the day-to- day HIV and AIDS related issues and problems that arise within the workplace and also outlines employee's rights, responsibilities and expected behavior in the workplace	Ministry of Health
20. National Children Policy, 2010 (GoK, 2010)	The overall goal of this policy is to realize and safeguard the rights and welfare of the child. The policy goals stated are based on the key pillars of Child Rights as articulated in the (UNCRC), 1989. These are Survival Rights, Development Rights, Protection Rights and Participation	National Council for Children's Services



National Constitution	Environmental role	Focal institutions & agencies
	Rights. The vision of this policy is to create an environment where all the rights of a child in Kenya will be fulfilled.	
21. Policy Statement on Public Private Partnerships, 2011	The role of the policy is to articulate and underscore the Government's commitment for an enabling environment for attracting private sector partners by providing an appropriate public-private partnership framework to enhance the attainment of Kenya Vision 2030 development goals in all sectors	National Treasury
22. Sessional Paper No. 10 of 2012 on Kenya Vision 2030	The role of the Sessional Paper is that of providing a legitimate anchor for Vision 2030 as the country's economic and national development guiding policy framework and ensure it is sustained up to 2030	Ministry of Devolution and Planning

2.2.2: Legal frameworks

In addition to the environmental policies, the mining sector is expected to strictly comply and operate within the various statutory obligations in the sectoral governance frameworks in order to ensure environmental sustainability. The non-compliance with statutory obligations can lead to legal liabilities including the discontinuation and closure of mines. **Table 2-12** shows the environmental legal frameworks in Kenya.

Table 2- 102: Environmental legal frameworks in Kenya

	2 102. Environmental legal frameworks in K	·
Legal framework	Environmental role	Relevant institutions & agencies
Environmental Management and Coordination Act (EMCA) Cap 387	The Act serves as the umbrella environment law. It provides for the establishment of an appropriate legal and institutional framework for the management of the environment	NEMA
2. Land Laws (Amendment) Act, 2016 No. 28 of 2016	This is an Act enacted to amend the laws relating to land in order to align them with the Constitution, to give effect to Articles 68(i) and 67(2) of the Constitution of Kenya	 Ministry of Land & Physical Planning National Land Commission (NLC)
3. Land Act No. 6 of 2012	The Act was enacted to give effect to Article 68 of the Constitution of Kenya, to revise, consolidate and rationalize land laws and to provide for the sustainable administration and management of land and land based resources	Ministry of Land & Physical PlanningNational land Commission
4. Community Land Act No. 27 of 2016	The Act was enacted to give effect to Article 63 (5) of the Constitution of Kenya in order to; provide for the recognition, protection and registration of community land rights; management and administration of community land; and to provide for the role of county governments in relation to unregistered community land	 Ministry of Land & Physical Planning NLC
5. National Land Commission Act No. 5 of 2012	The Act makes further provision to the functions and powers of the NLC especially with regard to qualifications and procedures for appointments to the Commission. It also gives effect to the objects and principles of devolved government in land management and administration	Ministry of Land & Physical PlanningNLC
6. Environment and Land Court Act No. 19, Revised edition 2015 (2011)	It is an Act of Parliament to give effect to Article 162(2)(b) of the Constitution; to establish a superior court to hear and determine disputes relating to the environment and the use and occupation of, and title to, land, and to make provision for its jurisdiction functions and powers	Environment and Land Court



		Relevant institutions &
Legal framework	Environmental role	agencies
7. Water Act, No. 43 of 2016	The Act provides for the management, conservation, use and control of water resources and regulation of rights to use water. It also provides for the regulation and management of water supply and sewerage services	 Water Resources Management Authority (WRMA) National Water Harvesting and Storage Authority Water Services Regulatory Board County governments
8. Forest Conservation & management Act No. 34, of 2016	The Act provides for the establishment, development and sustainable, management, including conservation and rational management of forest resources	Kenya Forest Service (KFS)County governments
9. Wildlife (Conservation and Management) Act Cap 376, 2013	The Act provides the law relating to the protection, conservation and management of wildlife in Kenya	Kenya Wildlife Service (KWS)
10. The Natural Resources (Benefit Sharing) Bill, 2014	The Bill is expected to establish a system of benefit sharing in resource exploitation between resource exploiters, the national government, county governments and local communities	Natural Resources Benefits Sharing Authority
11. Climate Change Act No. 11 of 2016	The Act provides for a regulatory framework for enhanced response to climate change. It is expected to provide mechanisms and measures to achieve low carbon climate development	 Ministry of Environment & Natural Resources National Climate Change Council
12. National Museums and Heritage Act 2011	The Act is responsible for the identification, protection, conservation and transmission of the cultural and natural heritage of Kenya	National Museums of Kenya
13. Physical Planning Bill 2015	The Act makes provision for the planning, use, regulation and development of land	 National Physical Planning Consultative Forum County Physical Planning Consultative Forum NLC
14. Public Health Act, Cap 24, 1986	The Act makes provisions for securing and maintaining good standards of public health	Ministry of Health
15. Employment Act, No. 11 of 2007 Revised Edition 2012 (2007)	The Act deals with fundamental rights of employees and is expected to provide basic conditions of employment of employees and control the employment of children	Ministry of Labour
16. Work Injuries Benefits Act (WIBA), Cap 236 of 2007	The Act provides for compensation to employees for work related injuries and diseases contracted in the course of their employment and for connected purposes	Directorate of Occupational Safety and Health Services
17. The Children Act Cap 141, 2001	The Act makes provisions for parental responsibility and protection of children in line with the principles of the Convention on the Rights of the Child and the African Charter on the Rights and Welfare of the Child and for connected purposes	National Council for Children Services
18. Occupational Safety and Health Act 2007	The Act of Parliament deals with safety, health and welfare of workers at workplaces. It provides for the establishment of the National Council for Occupational Safety and Health	 Ministry of Labour Directorate of Occupational Safety & Health National Council for Occupational Safety and Health
19. Radiation protection Act, Cap 243, (Revision 2012)	The Act provides for the protection of the public and radiation workers from the dangers arising	Radiation Protection Board



Legal framework	Environmental role	Relevant institutions & agencies
	from the use of devices or material Capable of producing ionizing radiation	
20. Public Access to Information No. 31 of Act 2016	The Act gives effect to Article 35 of the Constitution and confers on the establishment of the Commission on Administrative Justice	Commission on Administrative Justice
21. County Government Act No. 17 of 2012 (Revision 2015)	The Act gives effect to Chapter 11 of the Constitution of Kenya; to provide for county governments' powers, functions and responsibilities to deliver services	 Ministry of Devolution and Planning County Governments Council of Governors
22. County Governments Disaster Management Bill, 2014	The Act provides for the effective management of disasters by the county governments	Ministry of Devolution and PlanningCounty Governments
23. Public Private Partnership Act No. 15 of 2013	The Act provides for the participation of the private sector to partner with the government in development programmes through concession or other contractual arrangements	National TreasuryPublic Private Partnership Unit (PPPU)
24. HIV and AIDS Prevention and Control Act No. 14 of 2006	The Act aims to promote public awareness about the causes, modes of transmission, consequences, means of prevention and control of HIV and AIDS	Ministry of Health
25. National Cohesion and Integration Act No. 12 of 2008 (Amendment 2012)	The Act is aimed at encouraging national cohesion and integration by outlawing discrimination on ethnic grounds in all sectors	National Cohesion and Integration Commission

2.2.3: Regulations

Some of the legal frameworks in **Section 2.2.2** are accompanied by a wide range of regulations whose aim is to support effective enforcement of the respective laws. The mining sector is expected to comply with these regulations in order to ensure environmental sustainability. **Table 2-13** shows the environmental regulations in Kenya.

Table 2- 11: Environmental regulations in Kenya

	2 111 Environmental regulations in itemya	
Regulations	Environmental role	Focal institution
1. Environmental (impact assessment and audit) regulations, 2003 (LN No. 101)	The regulations are applied in the undertaking of EIAs, SESAs and environmental audits for subjectable policies, plans, programmes and projects related to Part IV, Part V and the Second Schedule of the Environmental Management and Coordination Act (EMCA Cap 387)	NEMA
2. Environmental (Water quality) Regulations, 2006 (Legal notice No. 121)	The regulations apply to water use in all sectors with a key objective of prohibiting discharge of effluent into the environment contrary to the established standards. The regulations further provides guidelines and standards for the discharge of poisons, toxins, noxious, radioactive waste or other pollutants into the environment in line with the Third Schedule of the regulations of EMCA Cap 387	NEMA
3. Environmental Management and Co-ordination (Controlled Substances) Regulations, 2007	The regulations aim to regulate the production, trade and use of controlled substances and products in order to ensure the elimination of substances and products that deplete the ozone layer	NEMA
4. Environmental Management and Co-ordination (Waste management) Regulations, 2006 – Legislative supplement No. 37	The regulations apply to all categories of wastes including mining sector waste	NEMA
5. Environmental Management and Coordination (Noise and excessive	The regulations aim at ensuring the maintenance of a healthy environment for all people in Kenya; the	NEMA



vibration pollution) (Control) Regulations, 2009 – LN 61	management of their surroundings and their psychological wellbeing by regulating noise levels and excessive vibration	
6. Environmental Management and Co-ordination (Air quality) Regulations, 2014	The regulations provide for the prevention, control and abatement of air pollution to ensure clean and healthy ambient air	NEMA
7. Environmental Management and Co-ordination (Wetlands, river banks, lake shores and SESA shore management) Regulations, 2009 – LN 19	The regulations provide for the conservation and sustainable use of wetlands in both private or public land and their resources in Kenya	NEMA
8. Draft Environmental Management and Coordination (Deposit Bonds) Regulations, 2014	The regulations are applicable in development activities which are likely to have adverse effects on the environment. The purpose of the regulations is to ensure:- a) good environmental practices; b) adequate remediation is achieved without adversely affecting economic viability; c) compliance with remediation obligations; and d) availability of funds for remediation activities at the end of the development activities	NEMA
9. Draft Environmental Management and Coordination (toxic and Hazardous Industrial Chemicals and Materials Management) Regulations 2013	The regulations ensure protection of human health and environment from adverse effects of toxic and hazardous chemicals and materials. The regulations apply to toxic and hazardous industrial chemicals and materials as classified in the First Schedule of the regulations	NEMA
10. Draft Environmental Management and Co-ordination (E-Waste Management) Regulations, 2013	The regulations deal with the management, handling, collection, transportation, recycling and safe disposal of E-waste in all sectors	NEMA

2.2.4: Guidelines and standards

The Government of Kenya has developed a wide range of guidelines and standards to be used in various sectors for purposes of ensuring compliance with some of the environmental laws and regulations outlined in **Section 2.2.2** and **2.2.3** (**Table 2-14**). The mining sector is expected to implement these guidelines and operate within these standards in order to ensure environmental sustainability.

Table 2- 14: Environmental guidelines and standards in Kenya

Gu	idelines & standard	Environmental role	Focal institution
1.	National Guidelines for Strategic Environmental and Social Assessment (SESA)	The guidelines provide the general principles, basic steps of SESA application in policies, programmes and plans. The guidelines also prescribe the tools and techniques to be adopted to enhance the practice of SESA in Kenya	NEMA
2.	Environment impact assessment (EIA) guidelines and administrative procedures	The guidelines provide information on the steps to be followed in the undertaking of project related EIAs in Kenya	NEMA
3.	E-waste management guidelines	The role of the guidelines is to streamline the procedures of handling and disposal of e-waste generated by various sectors to avoid the problem of environmental pollution	NEMA
4.	Environmental (Water quality) Regulations, 2006 (Legal notice No. 121)	The regulations contain standards for discharge of effluent into the sewer and aquatic environment	NEMA
5.	Environmental Management and Co-ordination (Waste management) Regulations, 2006 – Legislative supplement No. 37	The regulations provide the standards for treatment and disposal of wastes in the Third schedule (Regulations 26, 47)	NEMA



6.	County Public Participation Guidelines 2016	The aim of the guidelines is to strengthen democracy and participatory governance by increasing accountability, inclusivity and ownership in various devolution activities. The guidelines are intended for use by all stakeholders including national and county government officers, civil society and all government institutions that are engaged in public service delivery	Devolution &	
7.	Eviction and Resettlement Guidelines, 2009	The guidelines apply in respect of all land and all occupiers of land throughout the country	Ministry of Lands	

2.2.5: Strategies and action plans

In addition to all the above instruments, the Government of Kenya has developed a wide range of national strategies and action plans for ensuring environmental sustainability in all sectors (**Table 2-15**). The mining sector is therefore expected to support the implementation of these strategies and action plans in order to ensure environmental sustainability.

Table 2- 125: Environmental strategies and action plans in Kenya

Table 2- 125: Environmental strategies and action plans in Kenya						
Strategy/action plan	Environmental role	Focal institution				
1. Kenya Vision 2030	Vision 2030 prescribes the flagship programmes to be undertaken by the year 2030 in order to ensure a clean and healthy environment for the current and future generations	Vision 2030 Delivery Secretariat				
2. National Spatial Plan 2015-2045	The Plan details the national spatial vision that will guide the long term spatial development of the country for a period of 30 years. It covers the entire territory of Kenya and defines the general trend and direction of spatial development for the country. It aims at achieving an organized, integrated, sustainable and balanced development of the country, hence informing the future use and distribution of activities by providing a framework for better national organization and linkages between different activities within the national space	Ministry of Lands & Physical Planning				
3. National Climate Change Response Strategy (NCCRS) 2010	The purpose of this strategy is to provide robust measures needed to address the challenges posed by climate variability and change in all sectors	 Ministry of Environment Natural Resources National Climate Change Council 				
4. National Climate Change Action Plan 2013-2017	The aim of the First Action Plan is to support the implementation of the National Climate Change Response Strategy (NCCRS) that was launched in 2010. It is subject to revision and updating, in terms of section 13 of the Climate Change Act, during 2017, for the 2018-2023 period.	Ministry of Environment Natural Resources National Climate Change Council				
5. National Environment Action Plan (NEAP) 2009-2013	The NEAP provides a framework for the implementation of the Environment Policy and realization of the Sustainable Development Goals (SDGs) and Vision 2030	NEMA				
6. National Biodiversity Strategy and Action Plan (NBSAP) 2000	The NBSAP serves as a guide to integrate biodiversity concerns into relevant sectoral or cross-sectoral plans, programmes and policies, especially those that can have a bearing on national biodiversity. The NBSAP should be mainstreamed into the planning and activities of all those sectors that can have an impact (positive and negative) on biodiversity. Under the Convention of Biological Diversity, whose implementation is undertaken through the NBSAP, all countries including Kenya, are now required to revise and update their NBPSAPs to provide means of mainstreaming biodiversity conservation into sectoral areas, including the mining sector	Ministry of Environment & Natural Resources				



7. National Master Plan for	The Plan describes the rationale and justification as well	Ministry of	Water	and
the Conservation and	as the goal, objectives, strategies and actions that will	Irrigation		
Sustainable	facilitate the realization of restoration, conservation and			
Management of Water	sustainable management of water catchment areas. The			
Catchment Areas in	Plan will be implemented over a 19-year period from			
Kenya (2012), (GoK,	2011 to 2030 in line with the Kenya Vision 2030 and the			
2012b)	Constitution of Kenya, 2010			

2.2.6: Multilateral environmental agreements (MEAs)

Kenya as a member of the international family of nations is a signatory to various MEAs whose aim is to ensure global environmental sustainability at national level. Under the old constitution of Kenya, the ratification of treaties was purely within the purview of the executive arm of government, which could determine whether to present a treaty to parliament for operationalization through Kenyan legislation. In terms of article 2(6) of the Constitution of Kenya, 2010 as read together with section 12(1) of the 2012 Treaty Making and Ratification Act (No. 45 of 2012), Kenya remains a dualist jurisdiction whereby for treaties to take legal effect, it is mandatory for them to be approved both by Cabinet, and by Parliament. **Table 2-16** shows the MEAs which Kenya has ratified and whose obligations are relevant for the mining sector to integrate and domesticate in the governance framework in order to ensure environmental sustainability at national level for global environmental integrity.

Table 2- 16: Multilateral environmental agreements in Kenya

Table 2 10. Plantiaceral chyllorimental agreements in Kenya						
MEA	Environmental role	National focal point				
Convention on biological diversity (CBD Secretariat, 1992)	The CBD is also known as the "Omnibus Convention" or the "Convention for all life on the Earth" and is regarded as the over-arching biodiversity convention which deals with many critical issues including access and benefit sharing. Kenya signed the CBD on 11th June 1992 and ratified it on 26th July 1994	Ministry of Environment & Natural Resources				
2. Ramsar Convention (UN, 1971)	The objective of this Convention is to protect important habitats of water birds by controlling the encroachment and loss of wetlands and ensuring their wise use. Kenya signed the Ramsar Convention on 5 th October 1990 and ratified it on 5 th June 1991	KWS				
3. World Heritage Convention (UN, 1972)	The objective of the convention is to establish an effective system of collective protection of the cultural, historical and natural heritage of outstanding universal value. Kenya signed the World Heritage Convention on 5th June 1991	NEMA				
4. Convention on Migratory Species – Bonn Convention (UN, 1979)	The MEA was established in order to protect wild animals that migrate across national and trans-national boundaries, including migratory land and SESA animals. The aim of the Convention is to ensure that the traditional migration of wildlife through different regions of the world is sustained through international collaboration. Kenya entered into the agreement of adopting the Convention on Migratory Species on 1 st May 1999	KWS				
5. United Nations Framework Convention on Climate Change, UNFCCC (UN, 1992)	The convention sets an ultimate objective of stabilizing greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous anthropogenic (human-induced) interference with the climate system. Kenya ratified the convention in August, 1994	Ministry of Environment & Natural Resources				
6. Paris Agreement, 2015	An international agreement on climate change concluded under the UNFCCC governing global actions to address climate change, and creating obligations for developing countries through Nationally Determined Contributions (NDC) that specify national commitments to reduced GHG emissions through mitigation and adaptation actions – supported by climate finance	Ministry of Environment and Natural Resources				
7. United Nations Convention to Combat Desertification, UNCCD (UN, 1994)	The Convention specifically addresses the arid, semi-arid and dry sub- humid areas, known as the drylands, where some of the most vulnerable ecosystems and peoples can be found. It aims at forging a global partnership to reverse and prevent desertification/land	Ministry of Environment & Natural Resources				



	degradation and to mitigate the effects of drought in affected areas in order to support poverty reduction and environmental sustainability Kenya ratified the convention in June, 1997	
8. East African Community (EAC) Protocol on Environment and Natural Resources, 1999, Amendment 2006 (EAC, 1999)	The role of the protocol, although not yet in force, is to govern the partner states in their cooperation in the management of environment and natural resources over areas within their jurisdiction including transboundary environment and natural resources. It is a protocol of general application which applies to all activities, matters and areas of management of the environment and natural resources of the Partner States	

2.3: Governance Framework in Human Rights

Activities in the mining sector will, as indicated earlier, involve close interaction with society and can affect human rights of various people including the mine workers and host communities. This can occur in a number of ways such as:- a) impact on right to property especially where compulsory land acquisition is undertaken over private or communal land, to make way for a mining concern, b) impact on the right to a clean environment where pollution of the air or water occurs due to mining activities, c) impact on socioeconomic rights such as provision of employment and adequate wages, or d) impact on child rights such as violation of the right to basic education through engagement of child labour in mining activities, and many others.

The human rights governance framework in Kenya is governed by various policies and laws, whose implementation could help in mitigating human rights violations by mining activities by supporting or enhancing fulfilment and adequate protection of human rights. The baseline for protection and safeguarding of human rights in policy and legal provision is given in the Constitution of Kenya through the Bill of Rights as set out in Chapter 4. Some of the relevant provisions in Kenya, which are necessary for integration in the country's governance framework for the mining sector to safeguard human are outlined below.

2.3.1: Policy and legal frameworks

The Constitution of Kenya is anchored on the fundamental human rights principles which are reinforced in nearly all the chapters. It is therefore imperative for all the development sectors including mining to integrate the human right provisions in the Constitution of Kenya in sectoral policy, legal and regulatory frameworks. In addition to the Constitution of Kenya, human rights in the country are also anchored in the various other policies. Nonetheless, the evaluation of human rights, below, should be read in context of the provisions of the entire Bill of Rights in the Constitution. A number of legal frameworks in Kenya contain various statutory requirements to ensure protection of human rights in all sectors including the mining sector. In **Table 2-17**, four (4) broad categories of human rights are highlighted, and their provision under Kenyan law and policy is set out.

Table 2- 17: Human rights related policies in Kenya

Category Human Rights	of	of Provisions in legal and policy instruments			
Land Rights					
Constitution Kenya	of	 Right to own land anywhere in Kenya, art. 40 Right to prompt and just compensation upon compulsory acquisition Limitation on foreigners owning land to leaseholds only, art. 65 Powers of government to control use of any land for various reasons, including land use planning 			
National Policy		 Sessional Paper No.3 of 2009 on National Land Policy National Spatial Plan, 2015-2045 			
Land Act, 2012 Community La Act, 2016	and	 Procedures for compulsory acquisition of land in public interest or for public purpose Payment of just compensation, in a prompt manner. 			



National Land	Administration of the Compensation process by the National Land Commission
Commission Act,	
2012	
Draft Land	Procedures for compulsory acquisition, including valuation process – Third Schedule
Regulations, 2017	
Mining Act, 2016	Provisions relating to acquisition of land rights and compensation for such acquisition or for
	damage to land. S. 20, 21, 38, 40.
	Compensation where mining operations cause damage to land or property, s.153 Possulations relating to compensation guarantee hands, 152(2)
	Regulations relating to compensation guarantee bonds, 153(3)
	Involuntary displacement and resettlement safeguards
	CS and NLC to ensure that inhabitants or communities who prefer to be compensated by way
	of resettlement as a result of being displaced by a proposed mineral operation are settled on
	suitable alternate land, with due regard to their economic wellbeing, social and cultural
	values and the resettlement is carried out in accordance with the relevant physical planning
	law. S. 153
	• FPIC provisions , Regulation 23 of Mining (Licence and Permit) Regulations, 2017.
The Prevention,	• s.21 – obligation on government to abstain from displacement and relocation, to preserve the
Protection and	environment and protect persons from displacement by private actors.
Assistance to	• Exceptions. (i) Compelling and overriding public interests in the particular case; and (ii) no
Internally Displaced	feasible alternatives exist.
Persons and Affected	• S.21(4) Where is displacement from development projects is permanent, an obligation on the
Communities Act,	government to provide a durable solution to affected persons S.22. Obligation on government to take the following steps:
No.56 of 2012	o seek the free and informed consent of the affected persons; and
110.50 01 2012	 hold public hearings on the project planning.
Category of	Provisions in legal and policy instruments
Human Rights	
Right to a clean an	nd healthy environment
Constitution of	Right to a clean and healthy environment, art.42
Kenya	Obligation to apply National values and principles of governance, article 10(2), including
,	public participation, devolution, transparency, accountability, sustainable development
	Art. 70, access to Environment and Land Court
National Policy	Sessional Paper No. 10 of 2014 on the National Environment Policy
Legal Frameworks	EMCA, - environmental right, EIA, SEA, Audit, Monitoring, Inspection, Access to NET
	Mining Act –
	Mandatory compliance with laws concerning protection of environment - 176(1)
	Mandatory requirement of EIA, social heritage assessment, and approved EMP. S.176(2)
	Mandatory compliance with water legislation, concerning right to use water from any source.
	S. 177
	Mining rehabilitation and closure plans, S. 180(1) Environmental protection bands, S. 181
Catagory	Environmental protection bonds, S. 181 Provisions in logal and policy instruments
Category of Human Rights	Provisions in legal and policy instruments
Socio-economic rig	ıhts
Constitution of	Article 43: health, access to housing, reasonable standards of sanitation, drinking water,
Kenya	freedom from hunger, emergency medical services
,	Labour rights, art.41
	Child protection from hazardous or exploitative labour- Art 53(1)d)
	State to take measures, including affirmative action programmes for the youth - Art 55(c)
	Protection to every person is protected from forced labour - Article 30(2)
National Policy	The National Policy on Occupational Safety and Health, 2012
,	Sessional Paper No. 3 of 2014 on National Policy and Action Plan on Human Rights
	National Gender Policy 2011
	National Children Policy
	Sessional Paper No. 1 of 2015 on the National Policy on Elimination of Child Labour
Legal Frameworks:	Mining Act -
	Section 46, employment and training of Kenyans



	• s.109, Community Development Agreements. Mining (Community Development Agreement)	
	Regulations, 2017.	
	Labour Relations Act, 2007	
	Right to form and join trade unions	
	Right to collective bargaining agreements	
	Protection from discrimination	
	Right to fair wages	
	Labour Institutions Act, Act No.12 of 2007	
	Formation of Wages Councils	
Setting and gazettement of minimum wages		
Work Injuries Benefits Act (WIBA), No. 13 of 2007		
	Compensation for total and partial disablement	
	Right of employee to first aid, and transportation to hospital	
	Children's Act, Cap 141 Laws of Kenya	
	S. 4. Survival and best interests of the child	
	s.10 Protection from child labour	
	Occupational Safety and Health Act, 2007	
	S.4 – Duty of Director to issue Code of Practice	
	Protection of industrial information and protection of whistleblowers, s.40	
	Duties of Occupiers with respect to a workplace, s.6	
	Duty to establish a Safety and Health Committee at the work place, s.6	
	Duty to undertake a safety and health audit at the workplace, s.11	
	Duties of self-employed persons. (<u>relevant to Artisanal and Small Scale Miners-ASM</u>), s.11	
	Duty to report harmful emissions into the environment, s.19	
Category of	Provisions in legal and policy instruments	
Human Rights		
Civil and Political I		
Constitution of	the state of the s	
Kenya	Access to court (remedies), art. 22, 48, 70 Access to information art. 25	
	Access to information, art. 35 Fair Administrative Action and 47	
	Fair Administrative Action, art.47 Fair Heaving, art 50	
	Fair Hearing, art.50 Chapter 15 Commissions: KNCHR, CA1, NCEC.	
National Policy	Chapter 15 Commissions: KNCHR, CAJ, NGEC Consideral Paper No. 3 of 2014 on National Policy and Astion Plan on Human Bights	
National Policy	Sessional Paper No. 3 of 2014 on National Policy and Action Plan on Human Rights National Condox Policy 2011	
	National Gender Policy, 2011 National HTV and AIDS Policy, June 2000	
	National HIV and AIDS Policy, June 2009 National Children Policy	
	National Children Policy Sessional Paper No. 1 of 2015 on the National Policy on Elimination of Child Labour	
Logal Framoworks	Sessional Paper No. 1 of 2015 on the National Policy on Elimination of Child Labour Access to Information Act, 2016 — administration mechanisms for access to information from	
Legal Frameworks	public and private institutions	
	Fair Administrative Act, 2016	
	Commission on Administrative Justice Act, No.23 of 2011	
	Power of commission to carry out inquiries	
	Administration of the right of access to information	
	Kenya National Commission on Human Rights Act, No. 14 of 2011	
	protection and observance of human rights in public and private institutions	
	Power of commission to carry out inquiries	
	National Gender and Equality Commission Act, 2011	
	Promoting and protection of gender equality and freedom from discrimination	
	Power of commission to carry out inquiries	
	HIV and AIDS Prevention and Control Act 14 of 2006	
	Obligation on government to provide HIV and AIDS education and information. S.4	
	Obligation on government to provide HIV and AIDS education in the workplace. S.7 –	
	including on confidentiality and attitudes towards affected persons	
	Prohibition against compulsory HIV/AIDS testing. S.13	
	Environment and Land Court Act, 2012	
	Power of court to apply Alternative dispute resolution, s.20	



In addition to the Constitution and statutory provisions highlighted above, Sessional Paper No. 3 of 2014 on National Policy and Action Plan on Human Rights explains the overall approach taken by Kenya in administration and protection of human rights. This include provisions on the guiding principles for protection of human rights, including-

- (i) Universality and Inalienability: All human beings are born free and equal in dignity. All human rights inherently belong to each individual by birth, and cannot be taken away.
- (ii) Indivisibility: All human rights have equal status. Denial of one right invariably impedes the enjoyment of other rights.
- (iii) Interdependence and interrelatedness: The fulfilment of one right often depends, wholly, or in part, upon the fulfilment of other rights.
- (iv) Equality and non-discrimination: All individuals are equal as human beings and by virtue of the inherent dignity of each human person.
- (v) Participation and empowerment: All persons are entitled to active, free, and meaningful participation and access to information relating to the decision-making processes that affect their lives and well-being.
- (vi) Accountability, transparency, and Rule of Law: The State, its organs and its officials are the primary duty bearers in the fulfilment of human rights and are answerable for the observance of human rights. This means complying with legal norms and standards including accountability and transparency in this regard.

In its policy objectives, the National Policy and Action Plan on Human Rights commits to promote the observance, respect, promotion, protection and fulfilment of all human rights by the State and Non- State actors. In addition, and relevant to implementation of mining law and policy in Kenya, the National Policy and Action Plan on Human Rights further commits to mainstream human rights in public policy development and resource allocation, including through the human rights based approach to planning and implementation of programmes in all sectors of the country.

To support observance of human rights prescriptions by the mining sector, which involves communities, business and government, Kenya could benefit from international best practices, such as the United Nations (UN) Principles on Business and Human Rights, which set out principles to be observed by States (such as Kenya), and by corporations conducting business within the state. These principles are intended to support and enhance compliance with international human rights obligations (such as those set out below), and national obligation. The principles set out a foundational principle that States must protect against human rights abuse within their territory and/or jurisdiction by third parties, including business enterprises, by taking appropriate steps to prevent, investigate, punish and redress such abuse through effective policies, legislation, regulations and adjudication. In so doing, the principles require states to take the following operational steps –

- a) Enforce laws that are aimed at, or have the effect of, requiring business enterprises to respect human rights, and periodically to assess the adequacy of such laws and address any gaps;
- b) Ensure that other laws and policies governing the creation and ongoing operation of business enterprises, such as corporate law, do not constrain but enable business respect for human rights;
- c) Provide effective guidance to business enterprises on how to respect human rights throughout their operations;
- d) Encourage, and where appropriate require, business enterprises to communicate how they address their human rights impacts.

⁵ Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework (A/HRC/RES/17/4)



59

In addition, the principles set out guidance for corporations doing business in country, with the overarching principle that business enterprises should respect human rights and avoid infringing on the human rights of others and should address adverse human rights impacts with which they are involved. According to the principles, business can do so through a variety of actions, including by internalizing the following steps into their corporate governance structure —

- a) A policy commitment to meet their responsibility to respect human rights;
- b) A human rights due diligence process to identify, prevent, mitigate and account for how they address their impacts on human rights;
- c) Processes to enable the remediation of any adverse human rights impacts they cause or to which they contribute.

An additional best practice set out by the principles relates to business conducted by state-owned institutions. The principles requires the concerned State, e.g Kenya, to take additional steps to protect against human rights abuses by business enterprises that it owns or controls, or that receive substantial support and services from the state agencies, by requiring human rights due diligence. One outcome of these principles, in linking corporate governance to observance of human rights, is an opportunity for the mining sector to integrate the observance of human rights through the Companies Act, 2015, by ensuring that corporate governance requirements or guidelines for mining companies are supportive of human rights. It is therefore important to note that the country is undertaking development of a *National Action Plan on Business and Human Rights*, which upon completion will reinforce national application of these international best practices.

2.3.2: International agreements

Protection of human rights in Kenya is also undertaken in accordance with a number of international agreements which Kenya has ratified including those highlighted in **Table 2-18**.

Table 2- 18: Human rights related international agreements

L	egal framework	Human rights considerations	National focal point
1.	United Nations Universal Declaration of Human Rights	The Universal Declaration of Human Rights (UDHR) is a milestone document on human rights. The Declaration was proclaimed by the United Nations General Assembly in Paris on 10 December 1948 (General Assembly resolution 217 A) as a common standard of achievements for all peoples and all nations. It sets out, for the first time, fundamental human rights to be universally protected and it has been translated into over 500 languages	United Nations
2.	ILO Declaration on Fundamental Principles and Rights at Work	The ILO Declaration on Fundamental Principles and Rights at Work, adopted in 1998, makes it clear that these rights are universal, and that they apply to all people in all states - regardless of the level of economic development. It particularly mentions groups with special needs, including the unemployed and migrant workers. It recognizes that economic growth alone is not enough to ensure equity, social progress and to eradicate poverty	International Labour Organization
3.	African Charter of Human and People's Rights	The African Charter on Human and Peoples' Rights (also known as the Banjul Charter) is an international human rights instrument that is intended to promote and protect human rights and basic freedoms in the African continent	 Africa Union African Court on Human and Peoples' Rights



4. International
Covenant on
Economic, Social and
Cultural Rights

The International Covenant on Economic and Social Rights defines various socio-economic and cultural rights to which every human being is entitled, including enjoyment of just and favourable conditions of work such as through fair wages and equal remuneration for work of equal value without distinction of any kind, in particular women being guaranteed conditions of work not inferior to those enjoyed by men, with equal pay for equal work; and safe and healthy working conditions. The Covenant requires all state parties to take steps, individually and through international assistance and co-operation, to the maximum of their available resources, with a view to achieving progressively the full realization of the rights recognized in the Covenant by all appropriate means, including particularly the adoption of legislative measures

Committee on Economic, Social and Cultural Rights



3. SCOPE, APPROACH AND METHODOLOGY

The main aim of the SESA was to ensure the fulfilment of EMCA Cap 387 obligations (Section 42/57A), in relation to the recent mining sector governance reforms in Kenya specifically in terms of the introduction of the Mining & Minerals Policy (2016), Mining Act (2016) and associated mining Regulations (2017). EMCA Cap 387 requires a Policy SESA to be conducted in order to determine two issues, namely:- a) whether relevant national environmental obligations are well considered, and b) whether relevant social obligations including protection of human rights are well considered.

The purpose of the Strategic Environmental and Social Assessment (SESA) in Kenya was to assess ways in which environmental administration and governance in Kenya's mining sector is currently being conducted at both the national, county and community levels, with a view to increasing the level of attention to environmental and social priorities, improving sector capacity for managing environmental and social risks and strengthening social accountability. The SESA is expected to offer recommendations for:

- a) Improvements in the processes of environmental administration and governance in the mining sector so that the purpose and expectations of the various legislations are fully attained;
- b) Enhancements in the engagement of communities and wider society in environmental administration and governance in the mining sector, while incorporating the rule of law and human rights principles; and
- c) Capacity building for both government and community stakeholders to allow the processes of environmental administration and governance in the mining sector to be conducted in accordance with best practices and with proper consideration of the underlying goals of the Constitution of Kenya and human rights principles.

The SESA considered the following issues:-

- a) The extent to which meaningful consultations are undertaken with affected communities in the mining sector before licenses are granted with focus on representative, inclusive and fair process;
- b) Quality and effectiveness of the Environmental Impact Assessment (EIA) process for mining projects in the country;
- c) Quality of Environmental Management Plans (EMPs) in mining project EIAs including their implementation and follow-up monitoring;
- d) Community access to mining project information in a timely and understandable way;
- e) Coordination between national and county governments including the relevant departments and agencies and their role on environmental and social impact of the mining sector.

The above issues were examined throughout the entire life cycle of the mining process, starting from the issuance of exploration permits, the EIA and licensing process, compliance monitoring for the EMP, and to post-mine closure and rehabilitation. The SESA also broadly interrogated the spirit of the Minerals and Mining Policy 2016 and Mining Act 2016 especially with regard to existing institutional framework, mineral agreements, pre-emptive rights, mineral rights, mining benefit sharing, local equity participation, labor relations dispute resolution, and environmental protection.

3.1: Terms of Reference for the Strategic Environmental and Social Assessment

The purpose of this Strategic Environmental and Social Assessment (SESA) was to assess ways in which environmental administration and governance in the Kenya's mining sector are currently being conducted at both the national, county and community levels, and offer recommendations for:-

- a) Improved processes of environmental administration and governance in the mining sector so that the purpose and expectations of the various legislations are fully attained;
- b) Enhanced engagement of communities and wider society in environmental administration and governance in the mining sector, while incorporating the rule of law and human rights principles; and
- c) Capacity building for both government and community stakeholders to allow the processes of environmental administration and governance in the mining sector to be conducted in accordance



with best practices and with proper consideration of the underlying goals of the National Constitution, and human rights principles

Additionally, the SESA was expected to consider the following issues:-

- a) Extent of meaningful consultations with affected communities in the mining sector before licenses are granted with special focus on representative, inclusive and fair process;
- b) Quality and effectiveness of the Environmental Impact Assessment (EIA) process for mining projects in the country;
- c) Quality of Environmental Management Plans (EMPs) in mining project EIAs including their implementation and follow-up monitoring;
- d) Community access to mining information in a timely and understandable way;
- e) Coordination between national and county governments including the relevant departments and agencies and their role on environmental and social impact of the mining sector.

The detailed ToR for the SESA are is provided in **Annex 1**.

The SESA was undertaken in accordance with the 2012 National Guidelines for SESA in Kenya. The geographic scope considered the whole of Kenya but the stakeholder engagement concentrated on Nairobi which is the national seat for the governance of the mining sector in the country as well as Kwale and Kitui Counties as key mining areas in the country. The technical scope considered the issues provided in the Terms of Reference (**Section 2.8**). The scope was also configured carefully in order to ensure full consideration of the requirements in the 2012 National Guidelines for SESA and the revised Environmental (Impact Assessment and Audit) Regulations 2003.

3.2: Overall Scope and Road Map

The overall scope of the SESA covered environmental administration and governance of the mining sector as is currently conducted at the national and community levels with a special focus on the considerations for the rule of law and human rights. The SESA considered the existing opportunities for governance improvement governance, community engagement strengthening, improved environmental administration and incorporation of human rights in the sector. It further explored capacity building for the government and community stakeholders in accordance with the Constitution of Kenya, relevant regulation frameworks and human rights principles.

3.2.1 Geographical scope

The SESA process was conducted at national level through involvement of high-level upstream stakeholders in Nairobi and also at the local level with a focus on Kwale and Kitui Counties. The geographical scope covered the proposed coal mining sites of Mui Basin in Kitui County and other key mineral rich landscapes in the county. It also considered the current mining areas in Kwale County such as Base Titanium operational areas and artisanal mining sites. Consideration was also given to potential mining site such the niobium in Mrima Hill. The SESA focus in Nairobi involved consultations with key stakeholders in Nairobi which included government mining institutions, other agencies mandated to oversee governance in the mining sector, mining practitioners including prospecting companies, mineral dealers, trade unions, research and academic institutions, civil society organizations, professional bodies, and the general public.

3.2.1.1: Nairobi

The City of Nairobi is the Capital of Kenya and the principal seat of power in Kenya. Moreover, most of the head offices associated with the mining sector (Ministry of Mining, Directorate of Mines, Directorate of Geological Survey, Mineral Rights Board, National Mining Corporation, Kenya Chamber of Mines and Artisanal and Small-Scale Miners (ASSM), environmental governance (Ministry of Environment and Natural Resources, National Environment Management Authority (NEMA) and human rights (Attorney General, Kenya National Commission on Human Rights, Law Society of Kenya, Federation of Women Lawyers)) are all situated in Nairobi. In addition, most of the mining companies in the country have their head offices in Nairobi.



3.2.1.2: Kwale County

Kwale County was included in the SESA process because of the prevalent and active mining activities taking place in the area such as titanium mining in the Central, Southern and Northern Dunes, located approximately 50km south of Mombasa, and 8km inland from the Indian Ocean with an estimated 143 million tonnes of the mineral reserve. The county is one of the in the coastal region lying between latitudes 30 3'and 40 45'South and longitudes 380 31'and 390 31'East. It borders Taita Taveta County to the northwest, Kilifi County to the north-east, Taita Taveta and Kilifi to the North, Mombasa County and Indian Ocean to the east and United Republic of Tanzania to the south (**Figure 3-1**). The county covers an area of 8270.2 km², of which 62 km² is under water. The area excludes the 200-miles coastal strip along the Indian Ocean which constitutes the Exclusive Economic Zones (EEZ). The position of the county puts it in a strategic location for accelerated economic growth within the coast region.

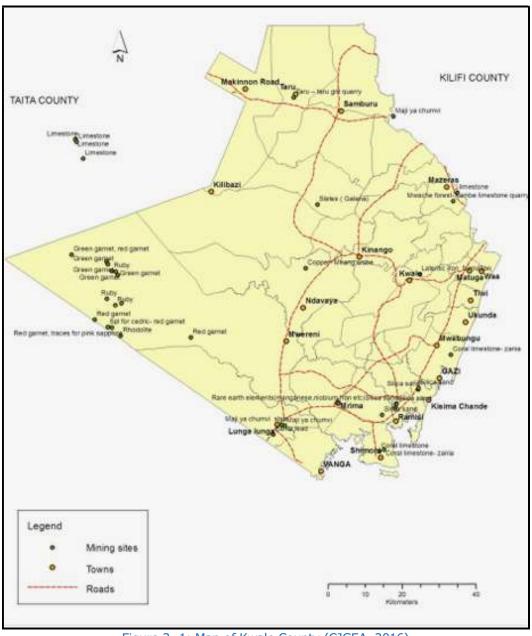


Figure 3-1: Map of Kwale County (CJGEA, 2016)



Kwale County is divided into three administrative sub-counties namely; Matuga, Kinango and Msambweni. These sub-counties are further divided into a total of nine divisions, 37 locations and 84 sub locations. Population density and distribution in Kwale County is strongly influenced by the topography and the agroecological set-up. The total population of Kwale was projected to be 713,488 persons in 2012 comprising of 346,898 males and 366,589 females. This is a 9.8% increase from 649,931 in 2009. The county population growth rate is 3.1%, and the sex ratio is 95 males per 100 females (Kwale County Government, 2013).

The mineral potential of sedimentary rocks of the Kenyan coast has been recognized since the turn of the last century. Silica sands for manufacture of glass are mined at Waa, Tiwi, Ramisi and Msambweni but a lot more potential exists for its exploitation. The county has potential for the exploitation of dozens of other minerals which have not been fully exploited including; titanium (rutile, ilmenite, zircon) at Nguluku and Shimba Hills; gemstones at Kuranze; niobium and rare Earth elements (niobium, phosphates) at Mrima Hills and Samburu; zinc, lead and copper at Mkang'ombe, Mwache, Dumbule and Dzitenge; baryte at Lunga-lunga; coal at Maji ya Chumvi; sandstones at Mariakani; limestone at Shimoni and Waa; coral limestone along the entire coastline and potential oil and gas in different onshore and offshore areas (Kwale County Government, 2013).

3.2.1.3: Kitui County

Kitui County is located 170km to the south-east of Nairobi City lying between latitudes 0° 10′ and 3°0′ south and longitudes 37°50′ and 39°0′east, about 160km east of Nairobi City. It is the sixth largest county in the country, covering an area of 30,496.51 km² including 6,302.7 km² occupied by Tsavo East National Park The county was included in the SESA because it has a high mining potential for a wide range of minerals such as; gypsum, iron ore, marble and coal. The county shares its borders with seven other counties, namely, Machakos and Makueni counties to the west, Tana River County to the east and southeast, Taita Taveta County to the south, Embu to the north-west, and Tharaka-Nithi and Meru counties to the north (**Figure 3-2**).

Kitui County has eight (8) sub-counties namely; Kitui Central, Kitui West, Kitui East, Kitui South, Kitui Rural, Mwingi North, Mwingi Central and Mwingi West. It is further sub-divided into forty (40) wards (Kitui County Government, 2013). Kitui County has a low-lying topography with arid and semi-arid climate with a rainfall distribution that is normally erratic and unreliable. The altitude in the county ranges between 400m and 1800m above SESA level with the topography characterized by hilly rugged uplands and lowlands. The general landscape is flat with a plain that gently rolls down towards the east and north-east where altitudes are as low as 400 meters. Apart from the Yatta Plateau and the range of hills in the central part of the county, the topography is undulating, and gives way to extensive plains to the east. The highlands, namely; Migwani, Mumoni, Kitui Central, Mui, Mutitu Hills and Yatta plateau, receive relatively high rainfall compared with the lowlands in Nguni, Kyuso and Tseikuru (Kitui County Government, 2013). The county's population was 1,012,709 according to the 2009 Population and Household Census Report. The report showed that 531,427 were females while 481,282 were males with the total population projected to grow to 1,086,598 by 2015. The population growth rate of the county at 2.1% is slightly lower than the national rate of 2.6% (Kitui County Government, 2013).

Kitui County has several minerals deposits such as; coal, limestone, granite, gypsum, vermiculte, sand and gemstones in most of its sub counties. The County has a vast array of unexplored industrial minerals including iron, mica, silver, copper and gemstones (sapphire, garnets, amethyst and ruby). Exploration and excavation of some of the minerals has started while for some it's yet to start. Excavation of limestone is undertaken at Mui and Kyuso, while gypsum is currently being mined at Mwingi South, and gemstone at Tharaka and Tseikuru. Sand harvesting and gemstones mining is done primarily by the local artisans (Kitui County Government, 2013). Mining of coal deposits at Mui Basin which runs from parts of Kitui East (blocks A and B) to Mwingi Central (blocks C and D) is among the national flagship projects geared towards realization of Kenya Vision 2030. Out of these blocks, concession has been done in Block C which has an estimated 400,000 million metric tonnes of coal that can be exploited for nearly 50 years according to the Ministry of

Energy and Petroleum. These deposits alone have an estimated value of KSh 3.4 trillion at current market rates, while the value of the reserves in Blocks A, B and D is yet to be determined, as exploration is still on-going. Exploration of limestone in Mutomo, Kyuso and Mutito is also currently on-going with major cement companies including Athi River Mining (ARM) Limited, East Africa Portland Cement Company and the Dangote Group from Nigeria having expressed interest in exploiting the reserves.

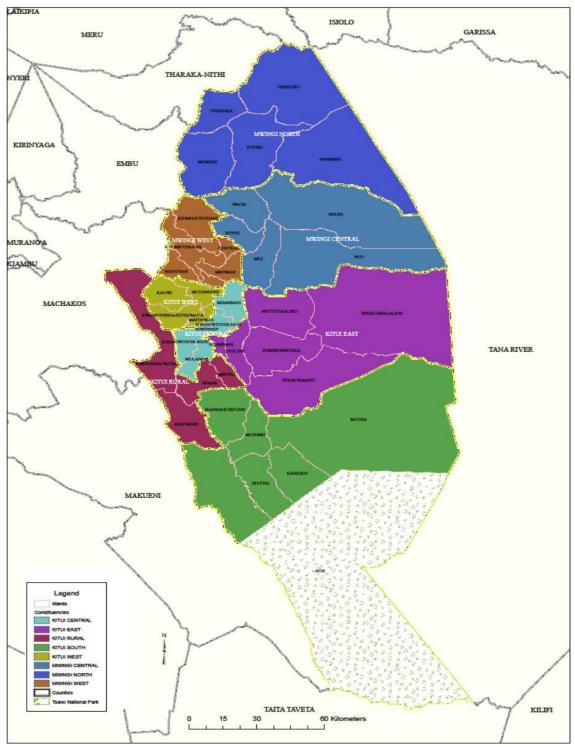


Figure 3- 2: Map of Kitui County (Kitui CIDP 2013-2017)



3.2.2 Technical scope

The technical scope for the SESA in the above areas mainly considered mining sector governance issues including public administration, regulatory institutional frameworks, environmental management, socio-economics, community engagement and participation, youth and gender inclusion, involvement of vulnerable society groups, application of human rights principles, rule of law, accountability and transparency, and information access. **Figure 3-3** outlines the technical activity flowchart used during the SESA process.

The systematic roadmap used in the policy SESA involved the following:-

- Documentary analysis and preliminary scoping consultations with stakeholders.
- Preparation of a Policy Brief.
- Preparation of scoping report
- Submission of Policy Brief and Scoping Report to NEMA.
- Field missions for baseline situation analysis.
- Stakeholder consultations and public participation.
- Policy impact analysis.
- Impact mitigation planning.
- Identification of gaps and alternatives options.
- Preparation of a draft report.
- Presentation of findings and stakeholder dialogue.
- Compilation, validation and submission of a final report.

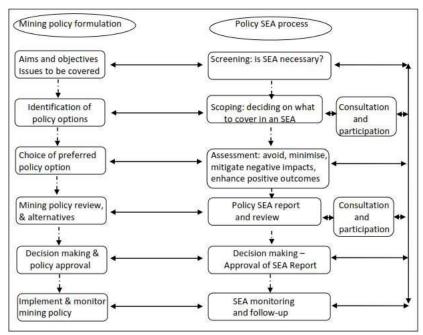


Figure 3- 3: General activity flowchart for the SESA process

3.3: PPP Frameworks

During the SESA process, a comprehensive PPP framework was developed in order to vigorously assess the effectiveness of the governance framework for the mining sector in the country, and specifically with regard to environmental protection and human rights. The framework consisted of a total of 93 environmental and human rights governance instruments in form of policies, legal frameworks, regulations, guidelines and standards as well as national strategies and action plans. These specifically comprised of 22 policies, 25 legal frameworks, 10 regulations, 7 guidelines and standards, 7 national strategies and action plans and 7 multilateral environmental agreements (**Box 3-1**).



Box 3- 1: Frameworks for the SESA PPP analysis				
Framework	Environment	Human Rights		
Policy	22	3		
Legal framework	25	8		
Regulations	10	-		
Guidelines and Standards	7	-		
Strategies and Action Plans	7	-		
Multilateral environmental Agreements (MEAs)	7	-		
Other international agreements	-	4		
Total	78	15		
Grand Total		93		

The environment and human rights instruments used to interrogate the mining sector governance framework in the PPP analysis are outlined below.

3.3.1: Environmental related frameworks

The frameworks used in the PPP analysis to assess the integration of environmental sustainability considerations in the governance of the mining sector outlined below.

3.3.1.1: Environmental Policy

A total of 22 policy frameworks were identified and considered relevant to the SESA, and are highlighted in **Box 3-2. Annex 2** provides details of the environmental policy obligations considered in the PPP analysis.

Box 3- 2: List of policies used for the PPP analysis

- 1. The Constitution of Kenya
- 2. Sessional Paper No. 10 of 2014 on the National Environment Policy
- 3. National Land Policy (2009)
- 4. National Land Use Policy 2016
- 5. National Water Policy (2012 Draft)
- 6. National Oceans & Fisheries Policy, 2008
- 7. Sessional Paper No. 1 Of 1999 National Policy on Water Resources Management and Development
- 8. National Policy for the Sustainable Development of Arid and Semi-Arid Lands of Kenya (2012)
- 9. Draft National Policy on Wetlands Conservation and Management (2013)
- 10. Sessional Paper of 2014 on National Climate Change Framework Policy
- 11. National Wildlife Conservation and Management Policy, 2012
- 12. Draft National Forest Policy 2015
- 13. National Policy for Disaster Management, 2009
- 14. National Gender and Development Policy, 2000
- 15. National Environmental Sanitation and Hygiene Policy 2016-2030
- 16. Draft National Policy on Peace Building and Conflict Management (2006)
- 17. Draft Devolution Policy, 2015
- 18. National Policy on Occupational Safety and Health, 2012
- 19. National HIV and Aids Policy, 2009
- 20. National Children's Policy 2010
- 21. Policy Statement on Public Private Partnerships, 2011
- 22. Sessional Paper No. 10 of 2012 on Kenya Vision 2030

3.3.1.2: Environmental legislation

A total of 25 legal frameworks were identified and considered relevant for the SESA PPP analysis for the mining sector as highlighted in **Box 3-3. Annex 3** provides details of the obligations for environmental legal frameworks considered in the PPP analysis.



Box 3- 3: List of environmental legal framework used for the SESA PPP analysis

- 1. Environmental Management and Coordination Act (EMCA) Cap 387
- 2. Land Laws (Amendment) Act, 2016 No. 28 of 2016
- 3. Land Act No. 6 of 2012
- 4. Community Land Act No. 27 of 2016
- 5. National Land Commission Act No. 5 of 2012
- 6. Environment and Land Court Act No. 19, Revised edition 2015 (2011)
- 7. Water Act, No. 43 of 2016
- 8. Forest Conservation & management Act No. 34, of 2016
- 9. Wildlife (Conservation and Management) Act Cap 376 of 1976, 2009
- 10. The Natural Resources (Benefit Sharing) Bill, 2014
- 11. Climate Change Act No. 11 of 2016
- 12. National Museums and Heritage Act 2011
- 13. Physical Planning Bill 2015
- 14. Public Health Act, Cap 242 (GoK, 1986)
- 15. Employment Act, No. 11 of 2007
- 16. Work Injuries Benefits Act, 2007
- 17. Children Act Cap 141, Revision 2012 (2010)
- 18. Occupational Safety and Health Act 2007
- 19. Radiation protection Act, CAP 243, (Revision 2012)
- 20. Public Access to Information No. 31 of Act 2016
- 21. County Government Act No. 17 of 2012 (Revision 2015)
- 22. County Governments Disaster Management Bill, 2014
- 23. Public Private Partnership Act No. 15 of 2013
- 24. HIV and AIDS Prevention and Control Act No. 14 of 2016
- 25. National Cohesion and Integration Act No. 12 of 2008 (Amendment 2012)

3.3.1.3: Environmental regulations

A total of 10 environmental regulations were identified and considered relevant to the SESA PPP analysis **(Box 3-4). Annex 4** provides details of the obligations for the environmental regulations considered the analysis.

Box 3- 4: List of environmental regulations used for the SESA PPP analysis

- 1. Environmental (impact assessment and audit) regulations, 2003 (Legal Notice 101)
- 2. Environmental (Water quality Regulations, 2006 (Legal Notice No. 121)
- 3. Environmental Management and Co-ordination (Waste management) Regulations, 2006 Legislative Supplement No. 37
- 4. Environmental Management and Coordination (Noise and excessive vibration pollution) (Control) Regulations, 2009 Legal Notice 61
- 5. Environmental Management and Co-ordination (Air quality) Regulations, 2014
- 6. Environmental Management and Co-ordination (Wetlands, river banks, lake shores and SESA shore management) Regulations, 2009 Legal Notice 19
- 7. Draft Environmental Management and Coordination (Deposit Bonds) Regulations, 2014
- 8. Draft Environmental Management and Co-ordination (E-Waste Management) Regulations, 2013
- 9. Radiation Protection (Standards) Regulations, 1986 (Legal Notice 54/1986)
- 10. Radiation Protection (Safety) Regulations, 2010

3.3.1.4: Guidelines and standards

Box 3-5 summarizes the 7 environmental guidelines and standards that were identified and considered to be relevant to the country's mining sector. **Annex 5** provides details of the environmental obligations for the guidelines and standards considered in the PPP analysis.



Box 3- 5: List of environmental guidelines and standards used for the SESA PPP analysis

- 1. National Guidelines for Strategic Environmental and Social Assessment (SESA)
- 2. Environment impact assessment guidelines and administrative procedures
- 3. E-waste management guidelines
- 4. Environmental (Water quality Regulations, 2006 (Legal notice No. 121)
- 5. Environmental Management and Co-ordination (Waste management) Regulations, 2006 Legislative Supplement No. 37
- 6. County Public Participation Guidelines 2016
- 7. Eviction and Resettlement Guidelines, 2009

3.3.1.5: National strategies and action plans

Seven (7) national strategies and action plans for environmental sustainability were found to be relevant to the mining sector and their obligation details are outlined in **Box 3-6** and **Annex 6**.

Box 3- 6: List of national strategies and action plans used for the PPP analysis

- 1. Kenya Vision 2030
- 2. National Climate Change Response Strategy (NCCRS) 2010
- 3. National Climate Change Action Plan 2013-2017
- 4. National Environment Action Plan (NEAP) 2009-2013
- 5. National Biodiversity Strategy and Action Plan (NBSAP) 2000
- 6. National Master Plan for the Conservation and Sustainable Management of Water Catchment Areas in Kenya (2012), (GoK, 2012b)
- 7. National Spatial Plan 2015-2045

3.3.1.6: Multilateral environmental agreements

Seven (7) multilateral environmental agreements (MEAs) were considered relevant for the mining sector and were used during the PPP analysis as highlighted in **Box 3-7** and **Annex 7.**

Box 3- 7: List of MEAs used for the PPP analysis

- 1. Convention on biological diversity (CBD)
- 2. Ramsar Convention
- 3. World heritage Convention
- 4. Convention on Migratory Species Bonn Convention
- 5. United Nations Framework Convention on Climate Change, UNFCCC
- 6. United Nations Convention to Combat Desertification, UNCCD
- 7. East African Community (EAC) Protocol on Environment and Natural Resources, 1999, Amendment 2006

3.3.2: Human rights related frameworks

The frameworks used in the PPP analysis to assess the integration of human rights considerations in the governance of the mining sector are also herein outlined and included the following:-

3.3.2.1: Policy

The Constitution of Kenya was considered to a key relevant policy for the PPP analysis, and Chapter 4 on the Bill of Rights specifically which is the longest chapter, comprising articles covering civil, political, economic, social and cultural rights. The other frameworks included Sessional Paper No. 1 of 2015 on the National Policy on Elimination of Child Labour and Sessional Paper No. 3 of 2014 on National Policy and Action Plan on Human Rights. **Annex 8** outlines the details of human rights obligations for the Constitution of Kenya which were considered in the PPP analysis.



3.3.2.2: Legal frameworks

A total of 8 legal frameworks were found to be applicable to the mining sector and were used during the PPP analysis and their details are outlined in **Box 3-8. Annex 9** provides details of the human rights obligations considered in the PPP analysis.

Box 3- 8: List of human rights related legal framework used for the PPP analysis

- 1. Kenya National Commission on Human Rights Act. 2011
- 2. Access to Information Act, 2016
- 3. Commission on Administrative Justice Act No 23 of 2011
- 4. The Fair Administrative Action Act, 2015
- 5. Land Act 2016
- 6. Community Land Act 2016
- 7. The Prevention, Protection and Assistance to Internally Displaced Persons and Affected Communities Act (IDP Act), 2012
- 8. Labour Relations Act, No. 14 of 2007.

3.3.2.3: International agreements

Four international agreements were also considered to be applicable to governance of the mining sector and were used during the PPP analysis as outlined in **Box 3-9. Annex 10** provides details of the human rights obligations considered in the PPP analysis.

Box 3- 9: List of human rights related international agreements used for the PPP analysis

- 1. Universal Declaration of Human Rights
- 2. ILO Declaration on Fundamental Principles and Rights at Work
- 3. African Charter of Human Rights

3.4: PPP Analysis

PPP analysis is the strategic process of evaluating policies, plans and programmes in order to avoid conflict between the such governance instruments and ensure complementarity and unity of purpose with regard to environmental sustainability. The PPP analysis mainly involved policy and plan analysis but not programmes as in plan or programme SESAs. The PPP analysis involved the interrogation of the existing framework for the overall management and governance in the mining sector in terms of the 18 instruments (**Section 2.1** & **Table 2.1**) against the 93 instruments (**Section 3.3** & **Box 3.1**) for environmental sustainability and protection of human rights in the country in the form of policies, legal frameworks, regulations, guidelines and standards as well as MEAs and other international agreements which Kenya has ratified. The main aim of doing this was to assess the level of integration of environmental and human right obligations in the Mining and Minerals Policy (2016), the Mining Act 2016 and associated regulations for sustainable governance of the mining sector.

The integration analysis involved a comprehensive review of relevant policies and legislation to identify all the environmental, social and human rights obligations and determine their level of mainstreaming in the mining policy, legal and regulatory frameworks. For example, the Kenya Constitution has a total of 12 environmental obligations as shown below, which can be counter-checked against the mining policy to reveal the policy gaps as shown in **Box 3-10.** The analysis was based on the following three integration classes depending on the level of mainstreaming of environmental and human right obligations in the Mining and Minerals Policy (2016), the Mining Act 2016 and associated regulations: - a) full integration or where 80-100% of the obligations were considered, b) moderate integration where upto 30-79% of the obligations were considered, and c) not fully integrated where less than 30% of the obligations were considered.



	Box 3- 10: Procedure used for the PPP analysis	
Name of policy	Relevant environmental obligations for the mining sector policy and governance	Integrated and non-integrated obligations in mining policy, legal and regulatory framework
The Constitution of	Article 10 – Supporting participation of the people in the protection of marginalized lands and sustainable development	√
Kenya	Article 42 – Supporting public involvement in ensuring the rights to a clean and healthy environment	√
	Article 43 – Supporting public involvement in ensuring the need for every person to have access to clean and safe water in adequate quantities	√
	Article 60 – Supporting public participation in land management especially within the principles of equitability, efficiency, productivity and sustainable land management practices	√
	Article 66 – Regulating use of any land, or any interest or right over any land, in the interest of public health or public planning	Х
	Article 69 - Environment and natural resources (1) (<i>a</i>) Ensuring sustainable exploitation, utilization, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits	,
	(b) Working towards the achievement and maintaining a tree cover of at least 10% of the land area of Kenya by the year 2030	Х
	(<i>d</i>) Encouraging public participation in the management, protection and conservation of the environment	√
	(f) Supporting environmental impact assessment, environmental audit and monitoring of the environment	√
	(g) Eliminating processes and activities that are likely to endanger the environment	Х
	h) Utilizing the environment and natural resources for the benefit of the people of Kenya	~
	Article 185: 22 - Protection of the environment and natural resources with a view to establishing a durable and sustainable system of development	Х

The underlying aim for the PPP analysis was to identify the following; - a) strengths in Kenya's mining sector governance framework in relation to international best practices, b) weaknesses in Kenya's mining sector governance framework in relation to international best practices, and, c) policy and regulatory gaps.

3.5: Strategic Evaluation of Mining Project Environmental Impact Assessments (EIAs)

Kenya like most other countries require an environmental impact assessment (EIA) before the issuance of EIA licenses mining projects. The EIA process provides a valuable opportunity for citizens to participate in decision making concerning mining activities but the problem is that project proponents often submit long, complex EIA reports and documents that are incomprehensible to the stakeholders especially the general public (Environmental Law Alliance Worldwide 2010). The protocol for the review of EIA reports by the relevant authority and agencies as well as the issuance of EIA licenses could also be unfavourable for mining investors thereby affecting economic development. Finally, the quality of follow-up monitoring and audits can also compromise the national goals for environmental sustainability. The aim of the strategic evaluation of mining project EIAs was to assess their effectiveness with regard to environmental protection, stakeholder involvement and safeguarding of human rights. The purpose of the audit was to determine the effectiveness of the EIA protocol according to international best practice. From this background, an evaluation of mining projects EIAs⁶ reports was undertaken for a 10-year period (2006-2016) using a sample of 50 reports at NEMA. The aim of the evaluation was to:-

a. Determine the types of mining projects for which EIA licenses had been applied for including the location of mining and proponents,

⁶ The reports included exploration and prospecting projects



72

- b. Assess the qualifications, relevance and competence of the EIA experts,
- c. Determine the quality of EIA implementation protocol and final reports in terms of adherence to relevant regulations and guidelines including comprehensive stakeholder consultation and involvement.
- d. Evaluate the capacity and quality of administrative review of mining project EIA reports by NEMA, and,
- e. Assess the quality of post mining project EIA report approval follow-up and compliance monitoring including post-EIA environmental audits.

The quality of the EIA reports was evaluated according to criteria and guidelines in the guidebook for evaluating the quality of mining project EIAs by the Environmental Law Alliance Worldwide (Environmental Law Alliance Worldwide 2010).

3.5.1: Criteria for evaluation of mining project EIAs

The evaluation of mining project EIAs was undertaken with reference to the revised Environmental Management and Coordination (impact assessment and audit) regulations, 2003 (Legal Notice 101), the Environment impact assessment guidelines and administrative procedures and the international guidebook for evaluating mining project EIAs (Environmental Law Alliance Worldwide, 2010). The evaluation criteria were based on four judgements mostly as prescribed in the international guidelines for evaluating mining project EIAs (Environmental Law Alliance Worldwide, 2010), namely:- a) "yes to all" if all the attributes in an evaluation criterion were fully considered in the EIA process, b) "yes to most" if 80% of the attributes were considered, c) "yes to a few" if less than 50% of the attributes were considered and d) "no to all" if none of the attributed were considered. The overall quality of the EIA process was based on four quality categories as follows:- a) "excellent" if the "yes to all" judgement for a given parameter was dominant, b) "satisfactory" if the "yes to most" grading was dominant, c) poor" if the "yes to a few" grading was dominant or d) very poor" if the "none to all" grading was dominant. **Annex 11** outlines the criteria used in the evaluation of mining EIA reports.

3.6: Stakeholder Engagement and Consultations

The stakeholder engagement and consultation process was preceded by comprehensive stakeholder analysis and mapping in order to determine the key stakeholders to be considered in the SESA process. Stakeholder engagement and consultations were undertaken in Nairobi Kwale and Kitui Counties as explained in **Section 3.2.1**. Both Kwale and Kitui counties were study cases of mining sites in rural areas while Nairobi was selected as a case that represented all stakeholders in the mining sector at the national level. The aim and purpose of the stakeholder engagement and consultations was to:-

- Provide the SESA team and stakeholders better awareness and insights on mining issues;
- Enable the SESA team and stakeholders have a better understanding of legal, policy, mining, environmental and human rights issues at the national and local levels;
- Act as an early warning of any existing or expected problems in the mining sector or affirmation that relevant issues are being addressed;
- Encourage better decision-making based on professional and local knowledge from those who have and those who are likely to be impacted by the mining sector decisions;
- Enable the SESA team to identify early potential problems, challenges, pitfalls, gaps and opportunities in the mining sector;
- Provide a forum for stakeholders to make any comments on mining policy, law and regulations, mining operations, environmental and human rights governance issues and suggestions for alternative options;
- Provide a mechanism for shared responsibility and problem solving for the mining sector;
- Improve communication between stakeholders in the mining sector;
- Provide a window for improved mining risk management; and
- Create opportunities for developing long-term trust in the mining sector.



3.6.1: Stakeholder analysis and mapping

Stakeholder analysis was undertaken to determine a key list of stakeholders across the entire spectrum in the mining industry, environment and human rights. The objectives of the stakeholder's analysis were to:-

- Identify groups, organizations and people having interests in the mining sector, environment and human rights;
- Understand the stakes, interests and levels of involvement for stakeholders and how they are affected by mining activities and projects;
- Assess stakeholders' stakes at different stages of the mining processes;
- Identify potential synergies and obstacles of the various stakeholders in the mining sector

Stakeholder mapping was undertaken using the principal clusters shown in **Table 3-1.** The stakeholder clusters were evaluated using a number of criteria including their: stake and rights in mining, roles and responsibilities, information type, and risk of non-involvement **(Table 3-1).**

Table 3- 1: Stakeholder clusters

Stakeholder Cluster	Stake in Mining	Stakeholder rights	Duties they bear	What do we need from them?	Risk if they are not engaged
Government Ministries	Strategic leadership, coordination including policy formulation and enactment of legal and regulatory frameworks	Constitutional rights, powers and duties	Protecting the environment and rights of people	Official policy direction	Legitimacy of the SESA is compromised
Statutory bodies	Specific functions	Specified by Acts of Parliament that create them	Specified by relevant Acts	Supporting the mining sector	Inadequate intuitional framework/support
County government	Investment and benefit sharing in mining sector	Constitutional rights, powers and duties	Specified in the Constitution	Plans and Strategies that favour mining sector	Failure to implement SESA recommendations at county level
Mineral prospectors	Mineral exploration and prospecting	Specified in the mineral prospecting licenses	Specified in the mineral prospecting licenses	Mineral exploration experience	SESA will lack mineral exploration experiences
Large scale mining companies	Profitable mineral extraction and processing	Specified in various licenses for mining activities	Specified in various licenses for mining activities	Mining experiences and earnings	SESA will lack mining experiences and earnings
Informal small-scale miners	Profitable mineral extraction and processing	Human rights	To have decent life	Experiences and challenges	SESA will lack the experiences of artisanal miners
Dealers in minerals	Profitable business	Specified in the dealership licenses	Specified in the dealership licenses	Mineral values	SESA will lack values of minerals
Academic institutions	Mining knowledge and skills	Impart knowledge and skills	Produce competent professional	Knowledge and skills in mining	Lack of contemporary knowledge



Stakeholder Cluster	Stake in Mining	Stakeholder rights	Duties they bear	What do we need from them?	Risk if they are not engaged
Research organizations	Mining research and development	Generating innovations	Generate innovations	Research findings	Lack of innovation
Professional organizations	Maintaining professional standards	Maintaining professional standards	Maintaining professional standards	Professional standards	Lack of standards for practitioners
Civil society	Environmental protection and guarding against violation of human rights	Environmental and human rights advocacy	Environmental and human rights advocacy	Environmental, human rights and development issues in mining sector	Environmental degradation and violation of human rights
Local communities	Effect of mining on local communities	Fair and adequate compensation, benefits from mineral resources and information	Effective defense of community interests	How local communities are affected by mining	Local people's participation in the SESA would be lacking
Women	Impacts of mining on women	Human rights	Safeguard human rights	Their views on mining in their areas	Lack of women voice on mining
Youth	Impacts of mining on the youth	Human rights	Human rights	Their views on mining in their areas	Lack of voice of the youths on mining
Opinion leaders	Opinions of the people	To speak on behalf the people and the environment	To support others where they can	Opinions & views on mining sector	Lack of people's views in the SESA

The stakeholder mapping involved a careful visualization of stakeholder clusters against their level of influence as shown in **Figure 3-4**.

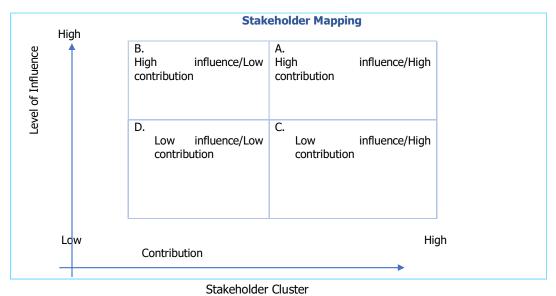


Figure 3- 4: Stakeholder mapping criteria



The following categories of stakeholders were identified using the mapping criteria in **Figure 3-4**:

- **Group A (high influence, high contribution):** These stakeholders have a high degree of influence in the mining sector and are of high importance to its success. Th SESA team made efforts to create good working relationships with these stakeholders, to ensure an effective coalition of support for the SESA.
- **Group B (high influence, low contribution):** These are stakeholders with high influence, who can affect the outcomes of the SESA, but whose interests were not necessarily aligned with the overall goals of the SESA.
- **Group C (low influence, high contribution):** These stakeholders are of high importance to the success of the SESA, but have low influence. This implies that they require special initiatives if their interests are to be protected. Because of their substantial contributions, they can help shape the implementation of the SESA.
- **Group D (low influence, low contribution):** The stakeholders in this group have low influence and low importance to the SESA objectives. They were therefore considered at low priority and allocated limited engagement space due to time constraints.

Table 3-2 shows the priority stakeholders selected using the criteria in **Figure 3-4**.

Priority stakeholders Stakeholder groups Ministry of Mining, Ministry of Environment and Natural Resources, NEMA, Directorate of Group A Occupational Safety and Health, Kenya National Commission on Human Rights, large scale miners, artisanal miners, local communities, Geological Society of Kenya (GSK) and county governments or Council of Governors Ministry of Interior and Coordination of National Government, Ministry of Health, minerals Group B prospectors, minerals dealers, universities, civil society organizations, women and opinion leaders **Group C** Youth Group D Research organizations

Table 3- 2: Prioritized stakeholders

3.6.2: SESA field missions and information gathering strategies

The overall approach for the stakeholder engagement was interactive, consultative, participatory, inclusive, and transparent. It was also adhered according to international stakeholder engagement best practices. The five methods used in engaging stakeholders for information gathering were as follows:-

- **a) Desk review**: This focussed on a comprehensive review of mining, laws, policies and regulations, environment management and human rights in the context of the mining sector.
- b) Key informant interviews (KIs): Key informant consultations targeted officials of national government, county governments, mining companies and civil society organizations in Kwale and Kitui counties and Nairobi City County. Consultations were held in the official's places of work and by virtue of their designations, their views represented the official positions of their organizations. Consultations were conducted in form of emails and telephones with stakeholders who could physically not be available. This involved face-to face interviews with individuals representing particular interests in the mining sector. These interviews were conducted using an open but guided framework which allowed for focused, conversational and two-way communication. Structured questions were also used during the interviews. The questions were designed and phrased prior to the

engagement based on the key goals for the SESA as outlined in the ToR. The list of key informants for the SESA in Kwale, Kitui and Nairobi is provided in **Annexes 15**, **17**, and **19**, respectively. The minutes for the key informant interviews in Kwale, Kitui and Nairobi are provided in **Annexes 34-41**, **49-52** and **59-69 (Vol 2)**, respectively for Kwale, Kitui and Nairobi.

- c) Focus group discussions (FGDs): The FDGs involved planned or purposeful discussions with each target of stakeholder category comprising of a small group of people (4 to 12 members) with wide knowledge and interests on mining, environment and human rights. The FGDs were designed to obtain relevant information about preferences and opinions in a relaxed, transparent, participatory and non-intimidating environment. The issues for discussion were carefully introduced to each of the FDG groups by the SESA team members and, in the ensuing discussion, group members responded and discussed the target issues by providing their opinions, ideas, and comments. The key issues of focus in the FDG were as follows:-
 - Stakeholder familiarity with the governance framework in the mining sector policy, legislation, regulations, national strategies and action plans, standards and guidelines,
 - Stakeholder views on whether the governance framework in the mining sector has
 effectively considered environmental and social issues throughout the mining life cycle
 especially through the EIA process,
 - Stakeholder views on whether the governance framework in the mining sector has effectively considered HR issues throughout the mining life cycle,
 - Stakeholder identification of gaps in the governance framework in the mining sector, and
 - Stakeholder recommendations for the strengthening of the governance in the mining sector.
- d) Public consultation meetings (barazas): The PCMs targeted communities where mining is already taking place and where minerals are known to exist but actual mining is yet to take place. The key issues of focus in the PMCs was similar to the FDGs. However, the PMCs were also used as a platform to discuss the level of public involvement in mining project EIAs including the issue of post-EIA monitoring and follow-ups. In Kwale County, such meetings were held in Nguluku (Titanium mining), Mrima Hill (Niobium mining), Mka'ngombe (gemstone mining, Denyenye, Tiwi-Maweni (coral stone mining) and Kuranze (gemstone mining). In Kitui County consultative meetings were held in Ikutha (iron Ore mining), Kaziku (limestone), Zombe (coal potential), Mui (coal), and Ngaaiye (limestone and marble). The attendance lists the PCMs are provided in Annexes 21-25 for Kwale and Annexes 27-32 for Kitui (Vol 2). The minutes for the PCMs are provided in Annexes 43-47 for Kwale and Annexes 53-58 for Kitui (Vol 2).
- **e) Dialogue workshops**: These involved three key types of consultation meetings and workshops as follows:
 - i. Scoping meetings

Three consultation meetings were held were held with key informants in Kwale, Kitui and Nairobi with the following objectives:-

- To allow relevant stakeholders to contribute in the SESA scoping process as prescribed in the 2012 National Guidelines for Strategic Environmental and Social Assessment in Kenya.
- To receive contributions on the key environmental issues which the mining sector governance framework should integrate.
- To receive contributions on the key human right issues which the mining sector governance framework should integrate.

Three dialogue meetings were held and stakeholders in Kwale, Kitui and Nairobi met in Diani Reef Hotel, Heritage Hotel and Silver Springs Hotel respectively. A total of 161 stakeholders were consulted (66 in Kwale, 48 in Kitui and 47 in Nairobi). The attendance lists and minutes for the



scoping dialogue meetings for Kwale are provided in **Annexes 71** and **72**, and for Kitui in **Annexes 73** and **74** respectively **(Vol 2)**.

ii. SESA consultation workshops

Three consultation meetings were held in Kwale and Kitui with the following objectives:-

- To share the findings as provided in the Draft SEA report.
- To allow stakeholders to contribute in the SESA scoping process as prescribed in the 2012 National Guidelines for Strategic Environmental and Social Assessment in Kenya

Two consultation workshops were held in Kwale and Kitui Counties with the aim of sharing the draft SESA report with the stakeholders in accordance with the National Guidelines for Strategic Environmental and Social Assessment in Kenya. The Kwale workshop was held on March 23, 2017 at Diani Reef Beach Resort, while the Kitui workshop was held on March 28, 2017 at Parkside Villa Hotel, Kitui town. The attendance lists and minutes for the dialogue workshops are provided in **Annexes 20** and **42** for Kwale, **Annexes 31** and **57** and **Annexes 33** and **70** for Nairobi (**Vol 2**).

iii. Wider peer review

This was undertaken in accordance with EMCA Cap 387 and the National SESA Guidelines (2012) as follows:-

- A public notice inviting stakeholders to review and comment on the report was placed in the Kenya Gazette and daily newspapers.
- The draft SESA report was uploaded on the NEMA website for free access to all interested parties.
- Hard copies of the draft SESA report were circulated to relevant institutions for review.
- Hard copies of the draft SESA report were circulated to relevant county offices for public review.

iv. SESA validation workshop

The national validation and adoption workshop was held in Nairobi at the Sarova Stanley Hotel on 19th October 2017 after the wider peer review. This was done after the comments from the wider peer review were incorporated in the report. The attendance list and proceedings for the validation workshop are provided in **Annexes** 75 and **76**, respectively.

3.6.2.1: SESA consultations in Kwale County

The Kwale field mission was undertaken between 22nd and 30thJanuary, 2017. The profile of stakeholders engaged and consulted in Kwale County included; government agencies, Kwale County government, large scale miners, small scale miners and civil society organizations (**Table 3-3**). During this time, the SESA team consulted a number of stakeholders who included national government agencies, Kwale County, mining companies, artisanal/small scale miners, civil society organizations and local communities. **Annexes 16** and **17** provides a list of the consultation activities in Kwale County.



Table 3- 3: Summary of the SESA stakeholder engagement activities in Kwale County

Category	Stakeholder	keholder engagement activitie Justification for	Location
Category	Stakenoluei	selection	Location
National	Ministry of Mining	Mining policy formulation	Diani Reef Beach Resort
government institutions	Ministry of Interior and Coordination of National Government (County Commissioner), Kwale, Deputy County Commissioners for Matuga, Msambweni, Kinango and Lunga sub-counties	Security in Kwale County	Kwale town and Diani Reef Beach Resort
	County Geologist	Handles mining issues at the county on behalf of Ministry of Mining	Diani Reef Beach Resort
	NEMA	Handles environmental issues in Kwale County	Diani Reef Beach Resort
	Kenya wildlife Service (KWS)	Wildlife conservation and management in Shimba Hills Game Reserve and Kwale County	Shimba Hills Reserve Headquarters and Diani Reef Beach Resort
	Water Resource Management Authority	Water resources management –	Mombasa and Diani Reef Beach Resort
		Coast Region	
	Kenya Forest Service (KFS)	Forest conservation and management in Kwale County	Kwale County KFS Office, Kwale town
	Ministry of Labour (Children Department)	Oversight of labour matters in Kwale County	Kwale town
County government	County Chief Executive Office,	Policy formulation at county level	Kwale town
	Physical Planning and Natural resources	Policy formulation and planning of natural resources at county level	Kwale town
	Community Development	Policy formulation and planning of natural resources at county level	Kwale town
	Public Health	Public health matters in the county	Kwale town and Diani Reef Beach Resort
Large scale mining companies	Base Titanium	Mining of Titanium	Msambweni and Diani Reef Beach Resort
	Kenya Calcium	Quarrying of coral stones to make calcium	Waa and Diani Reef Beach Resort
Small scale miners	Kuranze artisanal miners	Mining of gemstones	Kuranze and Diani Reef Beach Resort
	Denyenye quarry workers	Extraction of coral stones to produce blocks for building houses	Tiwi and Diani Reef Beach Resort



Category	Stakeholder	Justification for selection	Location
	Tiwi-Maweni quarry workers	Extraction of coral stones to produce blocks for building houses	Waa
	Mka'ngombe	Extraction limestone to produce building materials	Mka'ngombe
Civil society organizations	Kwale Natural Resources Network	Advocacy on sustainable use of natural resources in Kwale County	Ukunda and Diani Reef Beach Resort
	Plan International	Supporting development efforts in Kwale County	Kwale
	Haki Yetu	Human rights issues in Kwale County	Diani Reef Beach Resort
University	Kenyatta University	Training and reSESArch	Diani Reef Beach Resort
Opinion leader/Women representative	Nominated member in the National Parliament	County women representative (as opinion and women representative)	Diani Reef Beach Resort
Local communities (farmers, business	Mrima Hills community	Community living in an area rich with Niobium	Mrima Hills and Diani Reef Beach Resort
people, religious people, youths, women village administrators and assistant chiefs and kaya elders	Nguluku community	Communities that have relocated as a result mining of Titanium	Nguluku and Diani Reef Beach Resort

3.6.2.2: SESA consultations in Kitui County

The typology of SESA stakeholders in Kitui County included representatives from the national and county governments as well as local communities in mineral resource areas **(Table 3-4).** The Kitui field mission was undertaken between 6th and 11th February, 2017, and the stakeholders consulted included the national government agencies, government of Kwale County, mining companies, artisanal miners, civil society organizations and local communities. **Annex 18** provides a list of the consultation activities in Kitui County.

Table 3- 4: Summary of the SESA stakeholder engagement activities in Kitui County

Category	Stakeholder Category	Justification for Selection	Location
National	Ministry of Mining	Mining policy formulation	Kitui town
government institutions	County Commissioner, Kitui County	Coordinates national government agenda and security in Kitui County	Kitui town
	Assistant County Commissioner (DCC) Mutomo Sub County	Coordinates national government agenda and security in Mutomo Sub-county	Mutomo town
	Deputy County Commissioner, Ikutha Sub County	Coordinates national government agenda and security in Ikutha sub county	Ikutha town and Kitui town
	Water Resources Management Authority (WRMA)	Water resources management in in Kitui County/Region	Kitui town
	NEMA	Regulates environment issues in the county	Kitui Town



Category	Stakeholder Category	Justification for Selection	Location
County government institutions	County Secretary	Policy formulation and planning of natural resources at county level	Kitui Town
	Sub-County Administrator Ikutha Village	Management and delivery of services at the county level	Ikutha town
	Administrator Ngaaiye, Sub- County	Coordinates county government services at the sub-county level	Ngaaiye town and Kitui town
	Administrator Zombe, Sub-County	Coordinates county government services at the sub-county level	Zombe town and Kitui town
	Administrator Mathuki	Coordinates county government services at the sub-county level	Kitui town
	Chief Physical planner	Physical planning in Kitui County	Kitui town
Civil society organizations	Center for Human Rights and Civic Education (CHRCE) and other community based organizations	Human rights and civil education	Kitui town
Opinion leader	Member of County Assembly, Kyuso	Elected people's representatives at county level	Kitui town
Local communities (farmers, business people, youths, women, religious	Ikutha Community	Community where there is iron ore and gemstones along Tiva River.	Ikutha Village where artisanal mining of iron ore taking place and Kitui town site
leaders, village administrators and	Kanziku Community	Community where limestone and marble deposits are found	Kaziku town and Kitui town
assistant chiefs	Zombe Community	Community where coal deposits are found	Zombe town and Kitui town
	Mui Community	Community where coal, alumina clay, silica sand, gypsum and natural gas deposits are found	Mui Village and Kitui town
	Ngaaiye Community	Community where limestone and marble deposits are found	Ngaaiye town and Kutui town

3.6.2.3: SESA consultations in Nairobi

The stakeholder profile in the City of Nairobi consisted mainly of representatives from the public sector, private sector and civil society (**Table 3-5**). **Annex 20** provides a list of the consultation activities in Nairobi. **Annexes 57-67** provides the minutes for consultations in the City of Nairobi.



Table 3-5: Summary of the SESA stakeholder engagement activities in Nairobi

Category	Stakeholders consulted
National Agencies	Ministry of Mining, Ministry of Environment and Natural Resources, Ministry Labour and East African Affairs, Directorate of Occupational Safety and Health, National Environmental Management Authority, National Lands Commission, Kenya Forest Service, Kenya National Commission for Human Rights
County Government	Council of Governors
Large scale mining operators	Bamburi Cement, East African Portland Cement, Tata Chemicals, Magadi
Professional Organizations	Kenya Geologists Association, Law Society of Kenya
Private sector	Kenya Chamber of Mines, Kenya National Chamber of Commerce and Industry, Kenya Private Sector Alliance,
Civil Society	Kenya Human Rights Commission, Institute of Human Rights and Business-Kenya, Groots, Act Change and Transform, Kenya Association of Physicians and Medical Workers for Social Responsibility, International Federation of Women Lawyers, National Council for Persons with Disability
Trade Unions	Central Organization of Trade Unions (COTU), Kenya Quarry and Mine Workers
Artisanal Miners	Kenya Association for Artisanal Miners

3.6.3: Stakeholder engagement strategy and communication tools

Various stakeholder engagement strategies and communication tools were used. **Table 3-6** outlines the key engagement strategy and tools used during the consultations.

Table 3- 6: Key engagement strategy and tools used during the SESA consultations

Engagement tool/strategy	Target stakeholder
Face-to-face interviews	Key informants (government official, mining companies, auxiliary institutions, CSO, and trade unions
Questionnaires	On request (two requested: Base Titanium and Ministry of Environment and Natural Resources)
Meetings, submissions and discussion	Civil society organization and mining publics
Dialogue workshop-guided questions and FGD	Kwale and Kitui Counties
Email	Institutions and individuals
Telephone	Mining businesses and /Civil Society Organizations (CSOs)
Letters	All key informants
Networking	Civil Society organization

3.5: SESA Indicators and Targets for Policy Impact Analysis (PIA)

The SESA indicators for mining PIA were identified after the scoping consultations and fact-gathering field missions in Kwale, Kitui and Nairobi. The indicators and targets were then identified and clustered according to the SESA thematic issues as shown in **Box 3-11**. The indicators were used throughout the policy SESA.



	Box 3- 11: SESA indicators and targets for PIA			
SESA	Indicators	Source	Targets	
dimension				
Environment				
Biophysical indicators	Clean and healthy environment	 Constitution of Kenya National Environmental Sanitation and Hygiene Policy Occupational Safety and Health Act 2007 National Environment Action Plan (NEAP) 2009-2013 Kenya Vision 2030 	Number of contented stakeholders	
	Noise and vibration	Environmental Management and Coordination (Noise and excessive vibration pollution) (Control) Regulations, 2009 – Legal Notice 61	Number of affected mining areas or stakeholders	
	Air quality	Environmental Management and Co-ordination (Air quality) Regulations, 2014	Number of poor air quality mining areas	
	Regulations, 2014 Protection of environmentally sensitive areas such as forests, wetlands and wildlife reserves Wildlife (Conservation and Management) Act Cap 376 or 1976, 1989 & Bill, 2013 National Climate Change Response Strategy (NCCRS) 2010 National Environment Action Plan (NEAP) 2009-2013 National Biodiversity Strategy and Action Plan (NBSAP) 2000 National Master Plan for the Conservation and Sustainable Management of Water Catchment Areas in Kenya (2012) (GoK, 2012b) Kenya Vision 2030	Number of affected mining areas		
	Pollution control	 National Water Policy Environmental Management and Coordination Act (EMCA) Cap 387 Public Health Act, Cap 242 Environmental (Water quality Regulations, 2006 (Legal Notice No. 121) Environmental (Water quality Regulations, 2006 (Legal notice No. 121) 	Number of affected stakeholders	
	Rehabilitation and restoration of all mining sites	 National Environment Policy National Land Policy National Water Policy Environmental Management and Coordination Act (EMCA) Cap 387 Draft Environmental Management and Coordination (Deposit Bonds) Regulations, 2014 National Environment Action Plan (NEAP) 2009-2013 	Number of rehabilitated mining sites according to the stakeholders	
	Rehabilitation and restoration of degraded wetlands and forests	 National Environment Policy National Land Policy National Water Policy Draft National Forest Policy Environmental Management and Coordination Act (EMCA) Cap 387 National Environment Action Plan (NEAP) 2009-2013 Kenya Vision 2030 	Number of rehabilitated mining sites according to the stakeholders	
	Effective EIAs	 National Environment Policy National Land Policy Land Act No. 6 of 2012 Water Act, 2016 National Museums and Heritage Act 2011 County Government Act 2012 	Level of stakeholder satisfaction	



		Environmental (impact assessment and audit) regulations, 2003 (Local Nation 101)	
	Follow-up environmental audits	2003 (Legal Notice 101) National Environment Policy National Land Policy	Number of follow-up environmental audits
Social indicators	Public access to mining project information	Public Access to Information Act 2016	Level of stakeholder satisfaction
	Public participation	 Environmental (impact assessment and audit) regulations, 2003 (Legal Notice 101) County Public Participation Guidelines 2016 	Level of stakeholder satisfaction
	Acceptable resettlement plans	Eviction and Resettlement Guidelines, 2009	Level of stakeholder satisfaction
	Sustainable solid waste management	 National Environmental Sanitation and Hygiene Policy Environmental Management and Co-ordination (Waste management) Regulations, 2006 - Legislative Supplement No. 37 Draft Environmental Management and Co-ordination (E-Waste Management) Regulations, 2013 	Level of stakeholder satisfaction
	Equitable sharing of natural resource benefits	Community Land Act, 2016 Natural Resources (Benefit Sharing) Bill, 2014	Level of stakeholder satisfaction
	HIV/AIDS control	 National Policy on Occupational Safety and Health National HIV and Aids Policy HIV and AIDS Prevention and Control Act No. 14 of 2006 	Level of stakeholder satisfaction
	Corporate and social responsibility and accountability	National Environment Policy	Level of stakeholder satisfaction
	Peace and security	National Policy for the Sustainable Development of Arid and Semi-Arid Lands of Kenya	Level of stakeholder satisfaction
Human rights			
Rights and fundamental freedoms	 Right to life (accidents) Equality and freedom from discrimination Human dignity Freedom of conscience, religion, belief and opinion Freedom of expression Access to information Freedom of association Protection of right to property 	 Constitution of Kenya Universal Declaration of Human Rights African Charter of Human and People's Rights 	Level of stakeholder satisfaction
Environment rights	Right to a clean and healthy environment	 Constitution of Kenya Community Land Act 2016 Universal Declaration of Human Rights African Charter of Human and People's Rights 	Level of stakeholder satisfaction
Economic and social rights	 Right to standard of health Right to proper housing, Right to reasonable standards of sanitation 	 Constitution of Kenya Universal Declaration of Human Rights ILO Declaration on Fundamental Principles and Rights at Work African Charter of Human and People's Rights 	Level of stakeholder satisfaction



	4. Right to clean and safe water5. Right to social security6. Right to education		
Fair administrative rights	Right to fair expeditious, efficient, lawful, reasonable administrative action Right to information access	 Constitution of Kenya Access to Information Act, 2016 Commission on Administrative Justice Act No 23 of 2011 The Fair Administrative Action Act, 2015 Universal Declaration of Human Rights African Charter of Human and People's Rights 	Level of stakeholder satisfaction

The selected indicators were used to evaluate the suitability and effectiveness of the mining sector policy and regulatory framework.

3.6: Analysis of Alternative PPP Options

Gaps analysis was undertaken through the following approaches:-

- a) Review of key documents policies, legal frameworks, regulations, guidelines and standards,
- b) Stakeholder engagement and fact gathering during field missions in Kwale, Kitui and Nairobi,
- c) Institutional capacity evaluation,
- d) Key informant stakeholders, and
- e) Benchmarking with best practices in the world.



4. PPP ANALYSIS AND GOVERNANCE IMPACT IDENTIFICATION

4.1: Overview

The PPP analysis for the policy SESA involved an evaluation of the 18 governance frameworks in the mining sector as highlighted in **Section 2.1** and **Table 2-1** against the 93 governance frameworks for environment and human rights as highlighted in **Section 3.3** and **Box 3-1** in order to establish the level of their integration for environmental sustainability and protection of human rights. Consequently, the level of integration in the mining sector governance of 25 policies, 33 legal frameworks, 10 regulations, 7 guidelines and standards, 7 national strategies and action plans as well as 11 international agreements was scrutinized during the SESA process. The underlying assumption is that lack of adequate integration in the mining sector governance prescriptions of the environmental and human right obligations is likely to cause problems with regard to environmental sustainability and protection of human rights. The findings of this analysis are herein outlined for the environment and human rights. The analysis was based on the following three integration classes depending on the level of mainstreaming of environmental and human right obligations in the Mining and Minerals Policy (2016), the Mining Act 2016 and associated regulations: - a) full integration or where 80-100% of the obligations were considered, b) moderate integration where upto 30-79% of the obligations were considered, and c) not fully integrated where less than 30% of the obligations were considered.

4.2: Integration Status for Environmental Obligations in the Mining Sector

The integration of obligations in 78 environmental frameworks in the 18 governance frameworks for the mining sector indicated that majority of the obligations in national policies were either well and fully, or moderately integrated with only 4 out of 22 policies (19%) not integrated. The non-integrated policies included; the National Water Policy (2012 Draft), National Wildlife Conservation and Management Policy, 2012, National Policy for Disaster Management, 2009 and the National HIV and Aids Policy, 2009. The pattern was similar for the legal frameworks with only 4 out of 25 legal frameworks considered as not integrated, namely; the HIV and AIDS Prevention and Control Act No. 14 of 2006, Radiation Protection Act CAP 243 (Revision 2012), National Cohesion and Integration Act 2011 (Amendment 2012) and the County Governments Disaster Management Bill, 2014. The key national strategy which was poorly integrated is the National Climate Change Response Strategy (NCCRS, 2010) including the National Climate Change Action Plan 2013-2017. This is compounded by lack of integration of the United Nations Framework Convention on Climate Change (UNFCCC) and the United Nations Convention to Combat Desertification (UNCCD).

The PPP analysis also showed that most of the current environmental regulations in Kenya are well considered in the governance framework for the mining sector except for the Radiation Protection (Standards) Regulations, 1986 (Legal Notice 54/1986) and the Radiation Protection (Safety) Regulations, 2010. This might create a risk in radiation related mining activities such as the on-going titanium mining in Kwale County. The same problem is associated with the proposed niobium mining in Mrima Hill in the same county. **Box 4-1** provides the findings of integration status for environmental obligations in the governance frameworks for the mining sector in Kenya. Further, **Annex 12** provides details on the integration status for specific environmental obligations in policy, legal frameworks, regulations, guidelines and standards, national strategies, action plans and MEAs. Overall, the governance framework for the mining sector governance has adequately integrated most environmental obligations. Only 13 out of 78 environmental sustainability instruments equivalent to 16.7% have not been integrated, namely; 6 environmental policies, 6 legal frameworks, 2 environmental regulations, 1 environmental guideline, 1 national strategy and 2 MEAs (**Table 4-1**).

4.2.1: Potential Impact of the Mining Sector on the Environment

The mining sector governance framework as it is currently configuration has both fully or well-integrated and poorly integrated environmental obligations which could have both positive and negative implications on the state of environment as highlighted below.



4.2.1.1: Well Integrated Environmental Obligations

The PPP analysis showed that environmental obligations in 32 sustainability frameworks were either fully or well-integrated in the mining sector governance framework (**Table 4-1**). This included 10 national policies, 10 legal frameworks, 3 environmental regulations, 4 guidelines, 2 national strategies and action plans and 3 MEAs. **Table 4-2** shows the environmental sustainability obligations in the 32 well-integrated frameworks in the mining sector and the potential implication.

Box 4-	Box 4- 1: Summary of integration status for environmental obligations in the governance frameworks for the mining sector in Kenya			
	Fully or well-integrated (80-100%)		Not fully integrated (<30%)	
Policy	 The Constitution of Kenya, 2010 National Land Policy, 2009 National Land Use Policy, 2016 Draft National Policy on Wetlands Conservation and Management, 2013 Sessional Paper of 2014 on National Climate Change Framework Policy National Gender and Development Policy, 2000 Draft National Policy on Peace Building and Conflict Management, 2006 Draft Devolution Policy, 2015 National Policy on Occupational Safety and Health, 2012 Sessional Paper No. 10 of 2012 on Kenya Vision 2030 	 Sessional Paper No. 10 of 2014 on the National Environment Policy Sessional Paper No. 1 of 1999 - National Policy on Water Resources Management and Development National Policy for the Sustainable Development of Arid and Semi-Arid Lands of Kenya, 2012 Draft National Forest Policy, 2015 National Environmental Sanitation and Hygiene Policy 2016-2030 Policy Statement on Public Private Partnerships, 2011 National Children's Policy, 2010 National Oceans & Fisheries Policy, 2008 	1. National Water Policy, 2012 Draft 2. National Wildlife Conservation and Management Policy, 2012 3. National Policy for Disaster Management, 2009 4. National HIV and Aids Policy, 2009	
Legal frameworks	 Environmental Management and Coordination Act (EMCA) Cap 387 Community Land Act No. 27 of 2016 Water Act, 2016 Wildlife (Conservation and Management) Act Cap 376 of 1976, 1989 & Bill, 2013 National Museums and Heritage Act 2011 Public Health Act, Cap 242 Physical Planning Bill 2015 Employment Act, CAP 226, Revision 2012 (2007) Occupational Safety and Health Act 2007 Public Private Partnership Act, 2016 	 Land Laws (Amendment) Act, 2016 No. 28 of 2016 Land Act No. 6 of 2016 National Land Commission Act No. 5 of 2012 Environment and Land Court Act No. 19, Revised edition 2015 (2011) Forest Conservation & Management Act No. 34, of 2016 The Natural Resources (Benefit Sharing) Bill, 20l4 Climate Change Act 2016 Public Access to Information Act 2016 County Government Act 2012 Work Injuries and Benefits Act, 2007 Children's Act, Revision 2012 (2010) 	 HIV and AIDS Prevention and Control Act No. 14 of 2006 National Cohesion and Integration Act 2011 (Amendment 2012) Radiation Protection Act CAP 243 (Revision 2012 County Governments Disaster Management Bill, 2014 	
Regulations	 Environmental (impact assessment and audit) regulations, 2003 (LN 101 Environmental Management and Coordination (Noise and excessive vibration pollution) (Control) Regulations, 2009 – Legal Notice 61 	 Environmental (Water quality Regulations, 2006 (Legal Notice No. 121) Environmental Management and Co- ordination (Waste management) Regulations, 2006 - Legislative Supplement No. 37 	1. Radiation Protection (Standards) Regulations, 1986 [Legal Notice 54/1986] 2. Radiation Protection (Safety) Regulations, 2010	



	3. Draft Environmental Management and Coordination (Deposit Bonds) Regulations, 2014	3. Environmental Management and Coordination (Air quality) Regulations, 2014 4. Environmental Management and Coordination (Wetlands, river banks, lake shores and SESA shore management) Regulations, 2009 – Legal Notice 19 5. Draft Environmental Management and Co-ordination (E-Waste Management) Regulations, 2013	
Guidelines & Standards	Environment impact assessment guidelines and administrative procedures Environmental (Water quality Regulations, 2006 (Legal notice No. 121) Environmental Management and Co-ordination (Waste management) Regulations, 2006 - Legislative Supplement No. 37 Eviction and Resettlement Guidelines, 2009	National Guidelines for Strategic Environmental and Social Assessment (SESA) County Public Participation Guidelines 2016	1. E-waste management guidelines
National strategies & Action Plans	National Biodiversity Strategy and Action Plan (NBSAP) 2000 National Master Plan for the Conservation and Sustainable Management of Water Catchment Areas in Kenya (2012)	 National Environment Action Plan (NEAP) 2009-2013 National Climate Change Action Plan 2013-2017 Vision 2030 National Spatial Plan 2015-2045 	1. National Climate Change Response Strategy (NCCRS) 2010
MEAs	Convention on biological diversity (CBD) Ramsar Convention Convention on Migratory Species – Bonn Convention	World Heritage Convention East African Community (EAC) Protocol on Environment and Natural Resources, 1999, Amendment 2006	Nations Framework Convention on Climate Change, UNFCCC United Nations Convention to Combat Desertification, UNCCD

Table 4- 1: Environmental PPP analysis summary

	Mining sector	Environment sector	Cross-sectoral integration status			
Governance instruments			Fully integrated (80-100%)	Moderately integrated (30-79%)	Not fully integrated (<30%)	Total
Policy	1	22	10	8	4	22
Legal frameworks	2	25	10	11	4	25
Regulations	14	10	3	5	2	10
Guidelines and Standards	1	7	4	2	1	7
Strategies and Action Plans	-	7	2	4	1	7
International agreements	-	7	3	2	2	7
Total	18	78	32	32	14	78



Table 4- 2: Summary of well-integrated environmental obligations in the mining sector

Framework		Specific obligations	Potential governance implications	Beneficiary
1. The Constitution 2010	ution of Kenya,	Ensuring clean and healthy environment	Clean and healthy environment	Society
2. National Land	d Policy (2009)	 Community land management and dispute resolution Communities participation in resource conservation Forest protection Sustainable land utilization and management Environmental assessments and audits 	 Community grassroots mediation of land disputes Involvement of community institutions in conservation e.g. WRUAs and CFAs 	Land
	d Use Policy 2016	 Promoting environmental conservation and preservation Controlling land wastage due to intensification of unsustainable mining Rehabilitation of mining fields after depletion of minerals Rehabilitation of mines and quarries; waste disposal sites and wastelands 	 Proper rehabilitation of decommissioned quarries and mines Improved standards of environmental conservation 	Environment
4. Draft Natio Wetlands Co Management	onservation and (2013)	 Conservation of wetlands Aplication of the polluter pays principle Equitable access to the resources for present and future generations 	Improved wetland conservation	Wetlands
	per of 2014 on limate Change Policy	 Increasing forest cover Rainwater harvesting Relying less on bioenergy and more on clean energy sources 	Increased tree cover	Forests
6. National Development	Gender and Policy, 2000	 Considering the needs and aspirations of all Kenyan men, women, boys and girls across economic, social and cultural lines Women empowerment 	Improved gender considerations	Society
	al Policy on Peace and Conflict , 2006	Involvement of local community institutions in conflict resolution	Mining conflict resolution	Society
8. Draft Devolut	tion Policy, 2015	Devolution implementation framework	Successful devolution in the mining sector	Society
9. National Occupational Health, 2012		 Affirmative action for addressing workplace gender biases in occupational safety and health Develop and implement workplace code of practice on HIV and AIDS at work Develop guidelines for provision of facilities for persons with disabilities and other special needs in workplaces Drug and substance abuse in workplaces Prevention of environmental pollution 	 Improved gender considerations Reduced HIV/AIDS preference Improved working conditions for the physically challenged Reduce drug abuse Improved productivity 	Society
10. Sessional Pa 2012 on Ken	aper No. 10 of ya Vision 2030	Adoption of environmentally-friendly mining policy	Improved mining environment	Environment



Framework	Specific obligations	Potential governance implications	Beneficiary
11. Environmental Management and Coordination Act (EMCA) Cap 387	Environmental impact assessment (EIA)	Environmental protection	Environment
12. Community Land Act No. 27 of 2016	 Equitable sharing of environment and natural resource benefit by the whole community including future generations; Transparency and accountability in environment and natural resources management 	 Improved resource benefit sharing Improved transparency and accountability in NRM 	Natural resources
13. Water Act, 2016	Public consultation in the issuance of water permits	More equitable sharing of water resources	Water resources
14. Wildlife (Conservation and Management) Act Cap 376	Prevention of development in National Parks without approved management plans	Increased use of protected area management plans:	Wildlife
15. National Museums and Heritage Act 2011	Conduct EIAs in all national monuments and protected areas	Environmental protection	Environment
16. Physical Planning Bill 2015	Developing national and county physical development plans	Sustainable development	Environment
17. Public Health Act, Cap 242	Protection of public water supplies	Improved public health	Society
18. Employment Act, CAP 227, Rev 2012	Prohibition against forced labour, discrimination in employment, sexual harassment and rights and duties in employment	Good terms of employment	Society
19. Occupational Safety and Health Act 2007	Maintaining safe working environment in mining areas	Improved public health and safety	Society
20. Public Private Partnership Act, 2016	Protection and preservation of the environment	Environmental protection by private mining companies	Environment
21. Environmental (impact assessment and audit) regulations, 2003 (Legal Notice 101)	Conducting EIAs in for projects with a risk of causing adverse environmental impacts	Environmental protection	Environment
22. Environment impact assessment guidelines and administrative procedures	Conducting EIAs in for projects with a risk of causing adverse environmental impacts	Environmental protection	Environment
23. Environmental Management and Coordination (Noise and excessive vibration pollution) (Control) Regulations, 2009 – Legal Notice 61	Permissible noise levels	Improved public health	Society
24. Environmental Management and Co-ordination (Waste management) Regulations, 2006 - Legislative Supplement No. 37	Sustainable solid waste management	Public health and safety	Society



Framework	Specific obligations	Potential governance implications	Beneficiary
25. Draft Environmental Management and Coordination (Deposit Bonds) Regulations, 2014	Restoration of degraded environments	Restoration of decommissioned mines	Environment
26. Eviction and Resettlement Guidelines, 2009	Displacement, resettlement and compensation of mining host communities	Proper resettlement and compensation of affected communities	Society
27. National Biodiversity Strategy and Action Plan (NBSAP) 2000	Sustainable use of biological diversity and protection of important biodiversity areas and hotspots	Biodiversity conservation in mining areas	Biodiversity
28. National Master Plan for the Conservation and Sustainable Management of Water Catchment Areas in Kenya (2012), (GoK, 2012b)	Sustainable use and conservation of water catchment areas	Sustainable water discharge	Environment
29. Convention on biological diversity (CBD)	Biodiversity conservation	Protection of biodiversity and ecosystems	Biodiversity
30. RAMSAR Convention	Wetland conservation	Protection of wetlands	Wetlands
31. World heritage Convention	Preservation of heritage sites	Protection of natural and cultural heritage sites	Environment
32. Convention on Migratory Species – Bonn Convention	Sustaining the movement of wildlife in the environment	Unobstructed wildlife movement	Wildlife



Box 4-2 shows the environmental sectors which are likely to benefit from the well-integrated environmental obligations. However, this is dependent on effective implementation of Mining and Mineral Policy 2016 and enforcement of the Mining Act 2016 as well as the supporting regulations.

Box 4- 2: Summary of the environmental components that are likely to benefit from the governance framework in the mining sector		
Environmental dimension	Attributes	Rank
Environment	 Environmental protection through mining project EIAs Environmentally-friendly mining Preservation of heritage sites Sustainable waste management Rehabilitation and restoration of decommissioned mines 	1
Society	 Compensation and resettlement of mining host communities Women empowerment Maintaining safe working environment in mining areas Noise pollution control 	2
Biodiversity	Protection of biodiversity and ecosystems	3
Wildlife	 Sustainable development in protected areas in accordance with approved management plans Free movement of wildlife in mining areas 	3
Wetlands	Conservation of wetlands in mining areas	3
Natural resources	Equitable sharing of mineral resource benefit by the whole community including future generations	4
Land	 Involvement of community institutions (e.g. WRUAs and CFAs) in conservation within the mining areas Community-based mediation of land disputes 	4
Forests	Afforestation in mining areas	4
Water resources	Equitable sharing of water resources	4

4.2.1.2: Integration Gaps for Environmental Obligations and Implications

The PPP analysis showed that some environmental obligations were either poorly or not integrated in the governance frameworks for the mining sector. Details of the affected obligations, their potential environmental implications and likely receptors of the negative impacts by the mining sector are outlined in **Table 4-3**.



Table 4- 3: Summary of environmental obligation integration gaps

	Gap type	Mining sector environmental implications	Impact receptor
Policy	Strategic environmental and social assessment	Unsustainable mining activities	Environment
	Climate change and disaster risks early warning and response	Climate change disasters e.g. floods, drought, landslides and disease epidemics	Environment
	Climate change disaster risk reduction	Climate change disasters e.g. floods, drought, landslides and disease epidemics	Environment
	Public participation in disaster management	Climate change disasters e.g. floods, drought, landslides and disease epidemics	Environment
	Climate change mitigation	Climate change disasters e.g. floods, drought, landslides and disease epidemics	Environment
	Institutionalizing payment for environmental services schemes in mining sector to support environmental conservation	Environmental degradation in mining areas	Environment
	Restoration and protection of ecosystems and biodiversity	Degradation of critical ecosystems and loss of species by mining activities	Critical ecosystems
	Incentives re-use, recycling of resources	Wastage of natural resources – e.g. water & energy	Natural resources
	Supporting the attainment of at least 10% of forest cover by the year 2030	Deforestation by mining sector	Forests
	Investment in commercial tree growing	Deforestation by mining sector	Forests
	Participatory management of indigenous forests	Deforestation by mining sector	Forests
	Valuation of forests	Deforestation by mining sector	Forests
	involvement of non-state actors and local communities in forest management	Deforestation by mining sector	Forests
	Increased per Capita water availability	Depletion of water resources	Water resources
	Storm water management and rainwater harvesting	Depletion of water resources	Water resources
	Water pollution control	Increased pollution of streams, rivers, lakes, wetlands and groundwater resources	Water resources
	Effluent water treatment and recycling	Increased pollution of streams, rivers, lakes, wetlands and groundwater resources	Water resources
	Protection of wetlands, flood plains	Increased pollution of streams, rivers, lakes, wetlands and groundwater resources	Water resources
	Water abstraction monitoring	Depletion of water resources	Water resources
	Rain water harvesting	Depletion of water resources	Water resources
	Conservation, protection and management of wildlife	mining activities	·
	Dispute resolution	Increased mining related conflicts	Society
	Adopting conflict-sensitive development approach	Increased mining related conflicts	Society
	Ensuring peace and security	Increased mining related conflicts	Society
	Forest resource conflict resolution and management	Increased mining related conflicts	Society
	Clean, disability-friendly and pleasant working environment in public places	Poor working conditions	Society
	Proper sanitary facilities	Poor working conditions	Society
	Conflict early warning and response	Increased mining related conflicts	Society
	Public participation in governance	Improper governance	Society
	Irresponsible behavior both for the workers and?	Increased spread of HIV/AIDS	Society
	Private sector participation in provision of public services	Inadequate CSR interventions — e.g. transport, water, sanitation, and housing	Society



	Gap type	Mining sector environmental implications	Impact receptor
Legal frameworks	Climate change disaster risk reduction	Climate change disasters e.g. floods, drought, landslides and disease epidemics	Environment
	Private sector involvement in low carbon development	Climate change disasters e.g. floods, drought, landslides and disease epidemics	Environment
	Low carbon technology	Climate change disasters e.g. floods, drought, landslides and disease epidemics	Environment
	Public participation in climate change mitigation	Climate change disasters e.g. floods, drought, landslides and disease epidemics	Environment
	Strategic environmental and Social assessments for county spatial plans	Environmental degradation due to mining activities	Environment
	Disaster risk reduction	Climate change disasters e.g. floods, drought, landslides and disease epidemics	Environment
	Misuse of natural resources	Loss of natural resources – e.g. soil, water, landscapes	Natural resources
	Community participation in forest management through CFAs	Deforestation	Forests
	Prevention of forest fires	Loss of forests	Forests
	Controlling the introduction of alien species	Introduction of alien invasive species	Biodiversity
	Protection of ecologically sensitive areas	Degradation of critical ecosystems and loss of species by mining activities	Biodiversity
	Drug and substance abuse in mines	Public health problem, crime and family breakdowns	Society
	Radiation protection	Radiation exposure	Society
	Land dispute resolution	Increased mining related conflicts	Society
	Revenue sharing criteria	Inequitable benefit sharing	Society
	Protection of person making disclosure	Lack of public whistle blowers	Society
	Public participation in the county planning	Inadequate public involvement	Society
	Public information access	Inadequate public involvement	Society
	Discrimination in employment	Inequitable benefit sharing	Society
Regulations	·		Environment
	Waste management	Environmental pollution	Environment
	Reduction of mining emissions	Air pollution	Environment
	Mining e-waste recycling	Environmental pollution	Environment
	Transportation of mining e-waste	Environmental pollution	Environment
	Sustainable effluent discharge	Environmental pollution	Environment
	energy	Wastage of natural resources – e.g. water & energy	Natural resources
	Recycling of resources	Wastage of natural resources	Natural resources
	Water quality monitoring	Deterioration of water quality	Water
	Wetland, riverbank, lake shore and SESA shore protection	Wetland loss and degradation	Wetlands
	Radiation protection	Risk of radiation exposure	Society
Guidelines & standards	None	None	N/A
National strategies and action plans	Climate change	Climate change disasters e.g. floods, drought, landslides and disease epidemics	Environment
MEAs	Climate change	Climate change disasters e.g. floods, drought, landslides and disease epidemics	Environment
	Desertification	Increased desertification	Environment



Box 4- 3: Summary of the environmental components that are likely to suffer from integration gaps in the governance framework in the mining sector		
Environmental dimension	Attribute	Rank
Environment	Climate change disasters (e.g. floods, drought, landslides and disease epidemics), desertification, air pollution, environmental pollution	1
Society	 Increased mining related conflicts Land related disputes Employment discrimination Poor working conditions Radiation exposure Increased spread of HIV/AIDS Inadequate CSR interventions Inequitable sharing of mining revenue Inadequate access to mining information 	
Forests	Deforestation by mining activities	3
Water resources	 Depletion of water resources Increased pollution of streams, rivers, lakes, wetlands and groundwater resources Deterioration of water quality 	
Natural resources	Overuse of natural resources (water & energy)Loss of natural resources (e.g. soil, water, landscapes)	4
Biodiversity	 Loss of critical ecosystems and loss of species by mining activities Introduction of alien invasive species 	5
Critical ecosystems	Degradation of critical ecosystems and loss of species by mining activities	6
Wetlands	Wetland loss and degradation	6

4.3: Human Rights Obligations and Integration Status in Mining Sector

Integration of obligations in 15 human right frameworks indicated that majority of the obligations in the Constitution of Kenya especially Chapter 4 on the Bill of Rights were either fully, well or moderately integrated in the mining sector governance framework (**Box 4-4**). **Annex 14** provides details on the integration status for specific human rights obligations in policy, legal frameworks, regulations and international agreements.

4.3.1: Mining Sector Governance and Human Rights

The current state of the governance frameworks in the mining sector showed both the well-integrated and poorly integrated or not integrated human rights obligations as outlined in **Table 4-4**. Only 6 out of 15 (40%) of the instruments for the protection of human rights are fully integrated in the governance framework for the mining sector.



Box 4- 4	Box 4- 4: Summary of integration status for human rights obligations in the governance frameworks for the mining sector in Kenya				
	Fully or well-integrated (80-100%)	Moderately integrated (30-79%)	Not fully integrated (<30%)		
Policy	Nil	 Constitution of Kenya Sessional Paper No. 1 of 2015 on the National Policy on Elimination of Child Labour 3. Sessional Paper No. 3 of 2014 on National Policy and Action Plan on Human Rights 	Nil		
Legal frameworks	 Access to Information Act, 2016 Commission on Administrative Justice Act No 23 of 2011 Land Act 2016 Community Land Act 2016 The Prevention, Protection and Assistance to Internally Displaced Persons and Affected Communities Act (IDP Act), 2012 	 Kenya National Commission on Human Rights Act, 2011 The Fair Administrative Action Act, 2015 Labour Relations Act, 2007 	Nil		
International agreements	1. Universal Declaration of Human Rights	 ILO Declaration on Fundamental Principles and Rights at Work African Charter of Human and People's Rights International Covenant on Economic, Social and Cultural Rights 	Nil		

Table 4- 4: Summary of findings for human rights PPP analysis

	Mining	Human rights	Cross-sectoral governance integration status		ntegration
	Mining sector governance framework	Number of human right frameworks	Fully integrated (80-100%)	Moderately integrated (30-79%)	Poorly integrated or not integrated (<30%)
Policy	1	3	-	3	-
Legal frameworks	2	8	5	3	Nil
Regulations	14	-	-	-	-
Guidelines and Standards	1	-	-	-	-
Strategies and Action Plans	-	-	-	-	-
Other international agreements	-	4	1	3	Nil
Total	18	15	6	9	Nil

4.3.1.1: Well Integrated Human Rights Obligations

The PPP analysis indicated that human rights obligations in a total of 6 sustainability frameworks were considered to be well integrated in the governance frameworks for the mining sector (**Table 4-5**). These findings show that the current governance frameworks in the sector if properly implemented they can ensure protection of most human rights especially the following as enshrined in the Constitution of Kenya:-

- Basic rights and fundamental freedoms
- Right to human dignity



- Right to life
- Gender equality
- Right for equality and freedom from discrimination
- Right for freedom of conscience, religion, belief and opinion
- Right to freedom of expression
- Freedom of association
- Right to property ownership
- Land rights
- Economic and social rights
- Rights of Work
- Protection of right to property
- Right to a clean and healthy environment

Table 4- 5: Summary of well-integrated human right obligations in the mining sector

Framework	Specific obligations	Potential governance implications	
1. Access to Information Act, 2016	Disclosure of mining information by public institutions	Improved protection of the right to information access	Society
2. National Gender and Equality Commission Act, No. 15 of 2011	Promote gender equality and freedom from discrimination	Implementation of gender mainstreaming in the mining sector, including in employment, equality of pay, work facilities	Society
3. Commission on Administrative Justice Act No 23 of 2011	Establishment of the Ombudsman	Good conditions for stakeholders to advance their mining complaints	Society
4. Land Act 2016	Security of land rights	Protection of right to property	Society
5. Community Land Act 2016 Community Land Act 2016	Recognition, protection and registration of community land rights	Improved community land rights Improved economic and social rights	Society
6. The Prevention, Protection and Assistance to Internally Displaced Persons and Affected Communities Act (IDP Act), 2012	Provides the principles and basis for a rights-based response to internal displacement	Human dignity	Society
7. Universal Declaration of Human Rights	Basic rights and fundamental freedoms to which all human beings are entitled	Protection of basic rights and fundamental freedoms to which all human beings are entitled	Society

Previous records in the KNCHR have shown that socio-economic and cultural violations in the country are the most reported incidences of human rights abuse. Civil and political rights violations have also been common in the past but were much lower than the socio-economic and cultural violations. Group rights violations increased sharply from 2008 to 2010 but dropped sharply thereafter. All these patterns were happening before the adoption of the Mining and Minerals Policy (2016) and the enactment of the Mining Act (2016) as well as the various mining regulations which have come with it. Accordingly, the full impacts of the new mining governance instruments will take a bit of time to be felt in the country.



4.3.1.2: Integration Gaps for Human Right Obligations and Implications

The findings of the PPP analysis also revealed that various human rights obligations were not fully integrated in the governance frameworks for the mining sector. **Table 4-6** shows the poorly integrated or un-integrated obligations, the potential implications with regard to the protection of human rights in Kenya. Further, the analysis showed that the two areas in which the current governance framework in the mining sector is likely to result in violation of basic rights as enshrined in the Constitution of Kenya are consumer rights and rights to expected administrative action. Abuse of consumer rights in the sector would include lack of proper safety devices as well as the need to produce good quality and genuine mineral products. The current framework has not adequately integrated the right to administrative action as enshrined in Article 47[1] of the Constitution, which recognises the entitlement of every citizen to administrative action that is expeditious, efficient, lawful, reasonable and procedurally fair; and, by implication, points to the obligations of a public officer while taking administrative action. This means that the sector might not completely ensure administrative justice in mining activities including being able to deal with vices like corruption and inefficiency.

Table 4- 6: Summary of human rights integration gaps

Affected rights Implications to society			
	Implications to society		
1. Constitution of Kenya	Consumer rights - goods and services of reasonable quality Right to administrative action that is expeditious, efficient, lawful, reasonable and	Provision of sub-standard goods and services Poor administrative action	
	procedurally fair		
2. Sessional Paper No. 1 of 2015 on the National Policy on Elimination of Child Labour	Protection against child labour	Child labour in mining areas	
3. Sessional Paper No. 3 of 2014 on National Policy and Action Plan on Human Rights	 Rights of Women Children's Rights Rights of Persons with Disabilities (PWDs) Rights of the Youth Rights of Older Persons rights of minorities and marginalized groups Rights of the Internally Displaced Persons (IDPs) Rights of Refugees 	Violation of human rights in mining areas	
4. Draft Gender Policy, 2011	 Achievement of gender equality Gender mainstreaming through integration of gender concerns into sectoral laws, policies and implementation of sectoral programmes, e.g in mining Taking affirmative action to enhance gender mainstreaming 	 Gender equality is a constitutional right Discriminatory treatment of women will result in violation of various rights including unequal pay. Enforcement of gender equality in implementing new mining law and policy is critical 	
5. Kenya National Commission on Human Rights Act, 2011	Recognition of the KNCHR	Poor recognition of the role of the KNCHR in the mining sector	
	Right to administrative action	Poor administrative action	



6. The Fair Administrative Action Act, 2015	Right to information, access	
7. Labour Relations Act, 2007	Trade union rights	Rights of miners to join trade unions
8. ILO Declaration on Fundamental Principles and Rights at Work	 Principles and rights in four categories, namely: Freedom of association and the effective recognition of the right to collective bargaining, Elimination of forced or compulsory labour, Abolition of child labour and Elimination of discrimination in respect of employment and occupation 	Violation of rights at work in mining areas
9. International Covenant on Economic, Social and Cultural Rights	Equal rights for men and women	Employment gender bias in mining areas
10. African	Right to security and peace	Insecurity Dear public convice
Charter of Human and People's Rights	Right of equal access to public service Right to proper physical and mental health	Poor public servicePoor health

The PPP analysis also indicated that the current configuration of governance framework in the mining sector has not fully embraced the spirit of the African Charter of Human and People's Rights specifically with regard to ensuring the right to security and peace, the right of equal access to public service and the right to proper physical and mental health. This can lead to a number of challenges such as insecurity through illegal mining, increased corruption among government officials, and reduction in transparency and public accountability. The governance weakness could also escalate problems of health disorders in the mining sector including; loss of hearing, ototoxic radiation effects, musculoskeletal disorders and traumatic injury.



5. ENVIRONMENTAL IMPACT ASSESSMENT IN THE MINING SECTOR

The mining sector is associated with a wide range of environmental risks due to activities such excavation and earthworks, tailings disposal and gaseous emissions which are likely to negatively affect land, water, air, biodiversity, ecosystems and society. Generally, mining activities lead to extensive vegetation clearing presenting a threat to the flora and fauna. Such areas also become vulnerable to degradation through soil erosion and environmental pollution. Waste management arising from different stages of mining processes is usually a major environmental problem around the world (NCI, 2015). Depending on the degree of pollution, this can lead to serious health risks to the public, livestock and wildlife including aquatic life such as birds and fish. The mining sector is also known to cause a wide range of social problems including land acquisitions, displacements, resettlements, revenue sharing conflicts and violation of child labour rules among others.

The environmental risks associated with mining development activities in the world therefore demands a very careful interrogation of such projects before their commissioning in order to ensure proper and sustainable implementation. Thereafter, mining projects must be subjected to regular monitoring in order to ensure that they are conducted in a sustainable way as part of the global efforts to safeguard Planet Earth as home for the current and future generations. Environmental impact assessment (EIA) has been identified as management tool for ensuring that all new development projects are sustainable, and their possible negative impacts are identified early in the project cycle and taken into account and mitigated at the project design stage. Consequently, EIA is considered as one of the most important tools for ensuring environmental protection and sustainability assurance for development activities around the world. The main role of is to ensure that all new development projects are sustainable, and their possible impacts to the proposed projects identified early in the project cycle and are taken into account at the project design stage.

One of the tasks in the policy SESA for the mining sector was to undertake an evaluation of mining project EIAs in Kenya in accordance with international best practice as provided in the guidelines by the Environmental Law Alliance Worldwide which are explained in **Section 3-5**. According to the Environmental Management and Coordination Act (EMCA, Cap 387), all mining projects in Kenya are listed in the Second Schedule of the Act and must be screened through pre-project EIAs and thereafter through regular environmental audits (EA) in order to ensure environmental sustainability. These environmental tests are usually conducted by the development investors in collaboration with external third party consultants and lead agencies as a strategy forensuring environmental protection and public safety in the country. This usually done in accordance with the Environmental Management and Coordination (impact assessment and audit) regulations, 2003 (Legal Notice 101) in Kenya. In recent years, the discovery of oil, coal and other minerals means that a lot of development projects will emerge to harness these resources. EIA is supposed to serve as an environmental tool for ensuring that economic development actions do not comprise the long-term sustainability of the environment for current and future generations.

5.1: Mining EIAs in Kenya

The evaluation of the 50 mining project EIA reports (including exploration, prospecting and processing) in the 2006-2016 period showed that 50% of the EIAs were associated with mining activities, 22% on both prospecting and mining, 18% on exploration and prospecting, 8% on mineral processing and 2% on both mining and processing. The list of mining project EIAs evaluated in the SESA is provided in **Annex 15**. **Table 5-1** shows the key types of minerals for which EIAs were undertaken. The findings showed that mining activities were dominated by gypsum, followed by gold, manganese, copper and iron ore. Gypsum deposits are common in areas such as Kitui and is commonly used in the manufacturing of gypsum boards, binders and plasters for house ceilings and interior partitioning. The geographic distribution of mining project EIAs is shown in **Table 5-2**. Most of the mining project EIAs were undertaken in Tana River County, followed by Kilifi, Kitui, Migori and Garissa. The evaluation showed that 38% of the mining project EIAs were undertaken in the coast region followed by the Rift Valley (20%), Eastern region (18%) and Nyanza (12.5%).



Table 5- 1: Types of minerals in the 2006-2016 mining project EIAs

Mineral	% of EIA reports in 2006-2016
Gypsum	32
Gold	12
Manganese	12
Copper	10
Iron ore	8
Diatomite	2
Graphite	2
Barite	2
Limestone	2
Precious & non-precious stones & minerals	2
Kyanite crystals	2
Rock material	2
Copper & non-precious minerals	2
Carbon dioxide	2
Pumice	2
Sodium Silicate	2
Magnetite	2
Silica sand	2
Total	100

Table 5- 2: Geographic distribution of mining project EIAs

County	% of EIA reports in 2006-2016		
Tana River	20.4		
Kilifi	16.3		
Kitui	10.2		
Migori	10.2		
Garissa	6.1		
Samburu	4.1		
Machakos	4.1		
Kajiado	4.1		
West Pokot	4.1		
Embu	2		
Baringo	2		
Makueni	2 2 2 2		
Homa Bay	2		
Tharaka Nithi	2		
Kwale	2		
Uasin Gishu	2		
Transmara	2 2		
Nakuru			
Taita Taveta	2		
Total	100		

The local proponents accounted for 92% of the EIAs. The EIA processing duration from the time of report submission to the issuance of licenses generally ranged from a minimum of one month to a maximum of



eleven months. The NEMA citizen service delivery charter proclaims that the processing of EIA licenses will usually take a maximum of 90 days.

5.2: Quality of EIA Experts

The analysis of the EIA reports revealed that only 39.1% of the studies were conducted by firms of experts with 60.9% undertaken by individual experts. The expectation was that the studies would be conducted more by firms rather than individual experts due to the complex nature of the mining EIAs. The average number of experts undertaking the assessment was 1-8 with 46.7% of the mining project EIAs being undertaken by a single expert and 4.4% by 6 experts. Only 26.1% of the mining project EIAs had an environmental specialist as lead expert. **Table 5-3** shows the team composition for the mining project EIAs in 2006-2016.

Table 5- 3: Team composition for the mining project EIAs in 2006-2016

Type of expert	Percentage (%) involvement in 50 EIA reports
Environment	7.4
Geology	3.7
Engineering	3.7
Environment, Ecology, Engineering & Social Development	3.7
Geomatic engineering & surveying	3.7
Occupational Health and Safety	3.7
Environment, Hydrology, Ecology, Engineering and Sociology	3.7
Public Health & OSH	3.7
Environment, Geochemistry, Economics, Ecology, Sociology	3.7
Not indicated	63
Total	100.0

5.3: Quality of Mining EIA Reports

The quality of mining project EIAs in Kenya was evaluated according to the guidelines in the quality guidebook for evaluating mining project EIAs by the Environmental Law Alliance Worldwide (Environmental Law Alliance Worldwide 2010). **Table 5-4** shows the findings on the evaluation of mining project EIA reports. The findings showed that the 2006-2016 reports were only excellent with regard to prediction of potential physical impacts and baseline environmental assessment. They were satisfactory with regard to the consideration of key EIA stages, prediction of potential social impacts, consideration of potential impacts across all mining stages, analysis of alternative options, impact mitigation, and environmental management and monitoring plan (EMP). The findings showed that the quality of reports was weak in terms of comprehensive consideration of all the phases of mining projects, adequacy of environmental regulatory framework, Consideration of potential biological impacts, human rights considerations and EIA consultation meetings. The quality was very weak in terms of the overall quality of stakeholder engagement and consultations, mining related climate change considerations, consideration of transboundary impacts and cost benefit analysis (CBA). The evaluation established that only a mere 7% (3 out of 50) of the approved mining projects in the 2006-2016 period had undertaken third party post-EIA follow-up environmental audits.



5.4: NEMA Database of EIA Reports

The EIA database at NEMA headquarters consists of both an electronic storage and hardcopy storage. The electronic storage is catalogued and maintained within the EIA section at NEMA. The active EIA reports and files are stored in the EIA section which is very congested (**Plate 5-1**). The active database is catalogued (**Plate 5-2**). The archival hardcopies of the EIA reports are stored in a container within the NEMA compound due to inadequate office space (**Plate 5-3**). The file storage in the container is not catalogued (**Plate 5-4**). Some of the weaknesses, challenges and risks associated with the current database storage include; a) difficulties in location and retrieval of files in the hardcopy database, b) risk of document damage through flood or fire hazards, and c) unhealthy working conditions in the container based EIA database due to poor aeration.

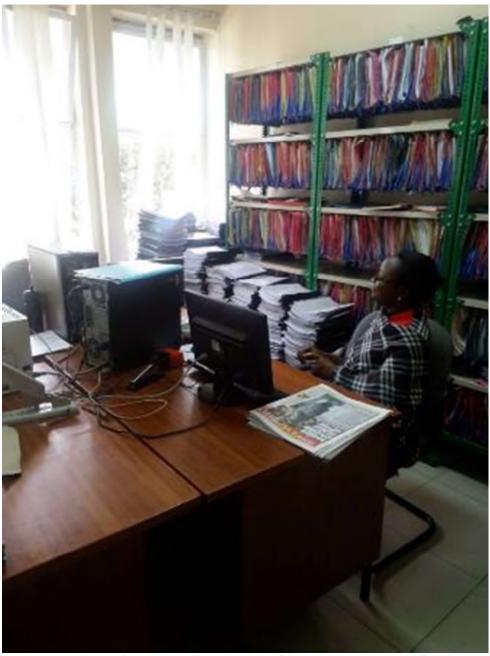


Plate 5- 1: Database of active EIA documents in the EIA section at NEMA headquarters



Table 5- 4: Summary of findings on the quality of mining project EIA reports

		Percentage (%) level of compliance in 50 EIA reports				
	Quality evaluation criteria	Yes to all	Yes to most	Yes to a few	None to all	Overall status
1.	Consideration of key EIA stages - Description of mining project, screening, scoping, baseline environmental assessment, comprehensive environmental regulatory framework, analysis of alternative options, stakeholder engagement, impact analysis, impact mitigation, decommissioning strategy, ESMP and environmental monitoring strategy	8	80	12	0	Satisfactory
2.	Consideration of all the phases of mining project - Exploration and prospecting, construction of access roads, site preparation and clearing, mining installations, mining activities, disposal of overburden and waste rock, ore extraction, tailings disposal	2.1	29.2	37.5	31.2	Poor
3.	Comprehensive environmental regulatory framework - Policies, laws (Acts of Parliament), regulations, standards, national strategies and action plans, MEAs & other agreements	2	20.4	73.5	4.1	Poor
4.	Consideration of potential physical impacts - Land environment, landscapes, hydrology & water resources, water quality, air quality, noise & vibrations, climate change	85.4	0	14.6	0	Excellent
5.	Consideration of potential biological impacts - Flora, fauna, endangered species, sensitive habitats & ecosystems, protected areas, biodiversity hotspots	2.1	25	68.8	4.2	Poor
6.	Consideration of potential social impacts - Displacement and resettlement, livelihoods impacts, traffic interruption, solid wastes, public safety & health, employment, CSR, emergency response and contingency plans, conflict resolution	2.1	56.2	41.7	0	Satisfactory
7.	Human rights considerations	16.7	0	79.2	4.2	Poor
8.	Evidence of actual baseline environmental assessment - Characterization of proposed mined materials, soil, water, noise, air quality, flora, fauna, climate, population characteristics, land use, social services	76	0	20	4	Excellent
9.	Stakeholder engagement and consultation - Stakeholder mapping, identification of stakeholders, directly affected stakeholders (DAS) & indirectly affected stakeholders (IAS), gender balance, youth & vulnerable groups	20	0	32	48	Very poor
10.	Adequate EIA consultation meetings - Number of meetings, convenient meeting venues, listing of SCM participants, listing of SCM contacts, stakeholder communication strategy, evidence of full project information disclosure, listing of stakeholder concerns, clear details of project approval or disapproval by stakeholders, adequate of consideration of stakeholder inputs	2	24	40	34	Poor
11.	Characterization of potential impacts for all mining stages - Preconstruction, construction, operation, decommissioning & rehabilitation	24.5	26.5	26.5	22.4	Satisfactory
12.	Climate change considerations - Loss of CO ₂ uptake through vegetation clearance, CO ₂ emission by mining machines, CO ₂ emission through mineral processing, considerations on climate change-proof mining infrastructure, climate change mitigation & adaptation, considerations on climate change related natural disaster risk reduction in the EMP	2	0	0	98	Very poor
13.	Consideration of transboundary impacts - Inter-village, inter-county, regional & international	8.2	0	2	89.8	Very poor
14.	Analysis of alternative options - Preferred option, No-action zero option, other options	2	63.3	10.2	24.5	Satisfactory
15.	Cost benefit analysis	4	0	0	96	Very poor
16.	Impact mitigation - Positive impacts, negative impacts, recommendations for mitigation of negative impacts, rehabilitation cost and funding allocation at decommissioning phase	32.7	61.2	6.1	0	Satisfactory
17.	Environmental management and monitoring plan (EMP) - Land environment, soil environment, water resources, air quality, noise & vibration, flora & fauna, public safety and health, decommissioning and rehabilitation, long-term monitoring protocol, responsible persons and agencies, timelines, guidelines	6	70	16	8	Satisfactory
18.	Overall quality of EIA report - Comprehensive non-technical summary, illustrative maps, diagrams and photos, clear conclusion and recommendations, clear and easy to understand	24.4	59.2	18.4	2	Satisfactory





Plate 5- 2: The catalogued active database of EIA documents at NEMA headquarters in Nairobi



Plate 5- 3: The container storing archival EIA documents within the NEMA compound





Plate 5- 4: Uncatalogued database of archival EIA documents in a container

5.5: EIA Report Review and Compliance Follow-Ups

Table 5-5 shows the strengths and weaknesses associated with the administrative review of mining project related EIA reports in Kenya before the final decision making by NEMA on the issuance or lack of issuance of EIA licenses for mining projects. The evaluation established that none of the 50 EIA reports sampled in the SESA received any comments from the general public although all the mining related EIAs are usually available for scrutiny to members of the public in the counties where the proposed mining activities will take place. The reports are also posted on NEMA website for a period of 30 days in order to allow public involvement in the review.

Table 5- 5: Strengths and weaknesses in the administrative review of EIA reports

	Administrative review of mining project EIA reports
Strengths	 Clear ToR for report review Use of a standard EIA report evaluation form Adequate number of reviewers Evidence of evaluation by team whose work is restricted to report review Involvement of a senior reviewer (master's degree holder) Involvement of relevant lead agencies Involvement of Ministry of Mining Review by a county based institution
Weaknesses	 Lack of involvement of a geologist or mining expert Lack of involvement of the Environment Institute of Kenya (EIK) Lack of interest by the general public to get involved



Consultations with Senior Compliance and Enforcement Officer and Senior Legal Officer in NEMA indicated that:-

- a) Annual environmental audits are expected to be conducted by mining companies which are required to submit reports to NEMA.
- b) Post-EIA compliance monitoring and inspections for mining projects is usually undertaken through targeted inspections, incognito walk-in inspections, and controlled audits. Such inspections are also undertaken following complaints from the public. The public can forward their complaints through the walk-in approach or simply by calling through a hotline or communicating through email, twitter and Facebook.
- c) Mining EMP non-compliance incidents are reported at the office of County Director of Environment (CDE) and are the classified into categories A to D with A being the most critical and responded to within 24 hours by the headquarters or the county office. The other categories are determined by whether the issue is environmental or public concern which may not be in their mandate.
- d) The actions taken for mining EMP non-compliances usually include either verbal or instructions for improvement, strict improvement order requirements, mining closure orders or arrest and prosecution.
- e) EIA and audit governance is faced by a number of challenges especially:-
 - Inadequate and/or misinformation by the experts as a result of influence by the proponents but NEMA is yet to prosecute any individual expert or firm.
 - Lack of response for relevant lead agencies on the administrative review of EIA reports.
 - Political interest in some mining projects.
 - Breach of license conditions.
 - Inadequate and over-stretched capacity and inadequate technical expertise for administrative review of EIA reports and subsequent compliance monitoring follow-ups.
 - Poor compliance monitoring of environmental audits.
 - Increased challenge of approval/non-approval of EIA licenses at the National Environment Tribunal (NET) which accounts for 60% of cases at the NET. There is usually a 50-by-50% chance of the NET overruling of NEMA decision. This erodes the governance confidence at NEMA. The key grounds of the NET related challenges include, inadequate public consultation, non-compliance to the law by the proponent or NEMA, malice/rivalry/competition to prevent another investor from putting up the same development.

5.6: Post EIA Environmental Audits

The SESA review of mining established that only a mere 7% (3 out of 50) of the approved mining projects in the 2006-2016 period had undertaken third party follow-up environmental audits. The audit usually adds value to the EIA by establishing whether and ensuring that the predicted and actual negative impacts in a project are identified and properly addressed. The environmental audit can be considered as an Environmental and Social Impact Assessment (EIA) support tool because it facilitates EIA compliance monitoring by ensuring that the operational recommendations of the EIA (especially in the environmental and social management plan (ESMP) are adhered to throughout the project lifecycle.



6. STAKEHOLDER ENGAGEMENT AND GOVERNANCE IMPACT ANALYSIS

6.1: Findings in Kwale County

The synthesis of the stakeholder concerns from all the consultations in Kwale County showed a refined total of 55 mining governance issues. However, the analysis of these against the new policy and law in the mining sector, namely Mining and Minerals Policy 2016 and Mining Act 2016 showed that out of these, 30 were found to be well-integrated, 9 moderately-integrated and 16 not well-integrated in the mining sector governance framework (**Table 6-1**). **Table 6-2** provides a list of the specific issues by stakeholders in Kwale County. **Table 6-1** shows that stakeholders, on the overall, considered the governance framework as well configured in terms of the required considerations for environmental and human right issues. Out of the 17 issues considered by the stakeholders as not fully integrated, 7 of them were exclusively on the environment whilst 5 were on mining and 2 on human rights. Therefore, the most of the poorly integrated issues were on environment followed by mining. The minutes for the stakeholder consultations in Kwale County are provided in **Annexes 34-47 (Vol. 2)**. **Plate 6-1** shows some consultations in Kwale County.

Table 6-1: Summary of Kwale stakeholder issues on integration of environmental and human right issues in the mining sector

in the mining sector							
In	tegration status	Number	er Sector				
			Mining	Environment	Human rights	Others	
1.	Well-integrated	30	10	8	6	6	
2.	Moderately Integrated	9	3	6	-	-	
3.	Not fully integrated	16	5	7	2	2	
	Total	55	18	21	8	8	

Table 6- 2: Summary of stakeholder mining governance concerns in Kwale County

We	ell-integrated	Moderately integrated	Not	integrated
1.	Pollution of water resources	Lack of coordination between NEMA and KFS on management of forests		Liaison Committees are not effective (Mining)
2.	Inadequate CSR provided by large scale mining companies	Over abstraction of water by mining company which creates shortage of water for downstream communities along River Mkurumudzi		Liaison Committees are not trusted by the local people (Mining)
3.	Un-satisfactory prospecting and mining agreements between mining companies and communities	Lack of a national level mechanism for sharing 20% of royalties for county governments		Control of the mining sector by cartels (Mining)
4.	Low employment among the youth in the mining sector	4. Lack of a local level mechanism for sharing the 10% royalties for the communities		Existence of illegal artisanal mining operations (Mining)
5.	Lack of skilled manpower at the local level	5. EIA reports are too technical for clear understanding at the local level	i	Mining related institutional structures are yet to be put in place at the County level (Mining)
6.	Inappropriate means of communicating between NEMA and local people regarding mining EIAs	Lack of transparency in issuance of mineral prospecting licenses at the national and county levels	(Lack of restoration/rehabilitation of closed or decommissioned mining sites (Environment)
7.	Lack of personal protective gears (PPGs) for mining workers	7. Inadequate NEMA capacity to monitor mining operations		Poor communication between NEMA and host communities after EIAs are undertaken (Environment)



8.	Absence of enabling institutions for artisanal miners	8. Inadequate capacity on the part of labour inspectors, occupational health and safety and county environmental committees to support implementation of environmental policies and enforce related laws, strategic plans and guidelines	8.	Lack of coordination between NEMA and WRMA on water resources management including demand and sharing by mining operations and other users (Environment)
9.	Lack of access to local and foreign markets for mining products	 Inadequate capacity for self- environmental monitoring and audit within mining companies 	9.	Poor capacity for the monitoring of the effects of radiation in mining (Environment)
10.	Poor working conditions and low wages in the mining sector		10.	Lack of information on the effects of mining related radiation on the environment and people (Environment)
11.	Unfair loss of land by the local people to mining companies		11.	High disaster unpreparedness (Environment)
12.	Creation of landless people from displacement without resettlement		12.	Social diseases such as STD, HIV/Aids (Environment)
13.	Unclear and non-transparent compensation mechanism for loss communal land transparent		13.	Lack of capacities of different agencies to enforce human rights in mining operations (Human rights)
14.	Irregular safety and environmental compliance inspections in large scale mining companies		14.	Lack of political good will to advocate for the protection of human rights at the local level (Human rights)
	Lack of inspections for artisanal mining Lack of regular access to		15.	Inadequate and unfair compensation of displaced communities (Mining & human rights)
	information on mineral prospecting, quantities and values			
17.	Lack of information on pollution threats from mining operations		16.	Weak capacity by DOSHS to inspect mining areas and operations (Environment and human rights)
	Inappropriate relocation of displaced communities			
	Failure by mining investors to implement EMPs			
20.	Inadequate information on types of minerals found in the county			
	Non-compliance with OSH regulations and guidelines			
22.	Lack of capacities by agencies to enforce gender considerations in mining operations			
	Lack of capacities by agencies to enforce social protection in mining operations			
	Risks and accidents to people and animal's due to unsecured mines			
	High poverty levels in the county			
26.	Rampant child labour is rampant			



- 27. Lack of site specific information on mineral quantities
- 28. Non-compliance with human rights obligations by some mining operations
- 29. Discrimination of women in employment
- 30. High unemployment and underemployment

Plate 6- 1: Stakeholder consultations in Kwale County



a) James Mutimu making a presentation during the SESA consultation workshop at Diani Reef Beach Resort in Kwale County





b) Phillip Wandera making a presentation during the SESA consultation workshop at Diani Reef Beach Resort in Kwale County



c) Plenary session during the SESA consultation workshop at Diani Reef Beach Resort in Kwale County



6.2: Findings in Kitui County

The synthesis of the stakeholder concerns from all the consultations in Kitui County showed a refined total of 59 mining governance issues. However, the analysis of these against the new policy and law in the mining sector, namely Mining and Minerals Policy 2016 and Mining Act 2016 showed that out of these, 44 were found to be well-integrated, 8 moderately-integrated and 7 not well-integrated in the mining sector governance framework (Table 6-3). Table 6-4 provides a list of the specific issues by stakeholders in Kitui County. **Table 6-3** shows that stakeholders, on the overall, considered the governance framework as well configured in terms of the required considerations for environmental and human right issues. Out of the 7 issues which were considered by the stakeholders as not fully integrated, only 2 were exclusively on the environment whilst 3 were on mining and 2 on human rights. Therefore, the most of the poorly integrated issues were on mining followed by environment and human rights. The minutes for the stakeholder consultations in Kitui County are provided in Annexes 48-57 (Vol. 2). Plate 6-2 shows some consultations in Kitui County. Kitui County had a slightly higher number of stakeholder concerns compared to Kwale County mostly due to the fears which people might have regarding the expected large-scale coal mining in the area. In contrast, the people in Kwale County are already familiar with large-scale mining especially through the exploitation of titanium in the area. The higher number of stakeholder concerns in Kitui County was also associated with a less clearer understanding of the amended governance sector in the mining sector through the Mining and Minerals Policy 2016 and Mining Act 2016.

Table 6-3: Summary of Kitui stakeholder issues on integration of environmental and human right issues in the mining sector

In	tegration status	Number	oer Sector			
			Mining	Environment	Human rights	Others
1.	Well-integrated	44	11	9	9	15
2.	Moderately Integrated	8	5	1	1	1
3.	Not fully integrated	7	3	2	2	-
	Total	59	19	12	12	16

Table 6- 4: Summary of stakeholder mining governance concerns in Kitui County

W	ell-integrated	Moderately integrated	Not fully integrated
1.	Ineffective collaboration and poor coordination between national and county government on mining operations	Unequal sharing of royalties among the national government, county government and communities	Land valuation does not consider the value of minerals discovered on the land (Mining)
2.	Concerns on potential risk of surface water pollution	Unstructured mechanisms for administration of mining royalties	Lack of capacity to deal with cartels in the mining sector (Mining)
3.	Concerns on potential risk of un-equitable water sharing	Sharing of compensation packages among family members during displacement	3. Lack of political goodwill and support by county and national government in the resettlement of displaced people (Mining)
4.	Failure to implement law on restoration of decommissioned mining sites	Lack of clarity on how mining benefits will be shared with host communities	4. Lack of mine inspection mechanisms (Environment)
5.	Lack of social advocacy	5. Inadequate NEMA personnel at county level	5. Inadequate network of NEMA offices in the mining rich areas (Environment)
6.	Community concern of the importation of mining employees from other areas	6. Lack of transparency in the mining sector by national government	6. Inadequate resettlement of affected persons or communities (Human rights)



7.	Inadequate public participation in mining	7. Lack of capacity by various	7. Lack of community
	EIAs	government agencies to enforce the new Mining Act (2016)	participation in formation of Liaison Committees (Mining and human rights)
8.	Fragmented and unco-ordinated operations of artisanal miners	8. Community fear of possible location of the coal processing plant outside the Mui basin	
9.	Lack of land survey and adjudication in prospecting areas		
10.	Lack of mutually acceptable land sale agreements between sellers and prospectors		
	High cost of processing title-deeds		
12.	Lack of awareness on value of land among the local communities		
13.	Long period taken to process land title-deeds		
14.	Lack of public disclosure on mineral resources after prospecting		
15.	Lack of information and or deliberate failure to disclose information on mining		
16.	Limited access to geological information		
17.	Lack of capacity by various government bodies to enforce the laws relevant to mining operations		
18.	Lack of guided public participation in prospecting, licensing and mining activities		
19.	Lack of mutually acceptable land and property compensation rates		
20.	Lack of guidelines on compensation for land in displacement cases		
21.	Lack of follow-ups on implementation of environmental management plans (EMPs)		
	Inadequate mapping of mineral resources Communication gap between NEMA and		
	communities		
24.	Lack of capacity to undertake environmental monitoring for mining operations to prevent adverse impacts on local communities		
25.	Under-staffing in NEMA offices		
26.	Concerns about willingness of mining companies to engage in adequate Corporate Social Responsibility		
27.	Inadequate advocacy campaigns and community capacity building on mining implementation and enforcement of policies, laws and human rights		
28.	Poor enforcement of child labour laws by relevant authorities		
29.	Insufficient efforts by CSOs to advocate for rights of the child living in the mining environment		
30.	Lack of assurance to non-violation of human rights in the mining agreements		
31.	Incidences of gender discrimination and sexual harassment in the mining sector		



- 32. Inadequate mechanisms of protecting disadvantaged groups (such as women, persons with disabilities and the elderly) from negative impacts of mining
- 33. Incomprehensive mining agreements between host communities and mining investors
- 34. Exploitation of host communities by mining companies and middle men
- 35. Lack of community education and awareness extension on the provisions of the new Mining Act, 2016
- 36. Lack of participatory mine inspection schedules
- 37. Lack of a strategy on how the new mining law will be implemented
- 38. Poor adherence to guidelines for establishment of Liaison Committees
- 39. Lack of suitable mining technologies to avoid displacement of local communities
- 40. Lack of capacity to mitigate against environmental pollutants
- 41. Inadequate compliance with EMCA Cap 387
- 42. Lack of Gender equity in property ownership and compensation
- 43. Inadequate devolution of mining to the county level
- 44. Fear that mine workers will not be fairly compensated

Plate 6- 2: Stakeholder consultations in Kitui County





a) Patrick Maingi (UNDP) making a presentation during the SESA consultation workshop at Parkside Resort in Kitui County



b) Richard Boiyo (Ministry of Mining) making closing remarks workshop at Parkside Resort in Kitui County



c) SESA dialogue meeting in Mui Basin, Kitui County



6.3: Findings in Nairobi

The synthesis of the stakeholder concerns from all the consultations in Nairobi showed a refined total of 41 mining governance issues. However, the analysis of these against the new policy and law in the mining sector, namely Mining and Minerals Policy 2016 and Mining Act 2016 showed that out of these, 19 were found to be well-integrated, 9 moderately-integrated and 13 not well-integrated in the mining sector governance framework (**Table 6-5**). **Table 6-6** provides a list of the specific issues by stakeholders in Nairobi. **Table 6-5** shows that stakeholders, on the overall, considered the governance framework as well configured in terms of the required considerations for environmental and human right issues. Out of the 13 issues which were considered by the stakeholders as not fully integrated, 8 were exclusively on the mining sector whilst 5 were on environment and none on human rights. Therefore, the most of the poorly integrated issues were on mining followed by environment. The minutes for the stakeholder consultations in Nairobi are provided in **Annexes 48-57 (Vol. 2)**. **Plate 6-2** shows some consultations in Kitui County.

Table 6-5: Summary of Nairobi stakeholder issues on integration of environmental and human right issues in the mining sector

In	tegration status	Number	Sector				
			Mining	Environment	Human rights	Others	
1.	Well-integrated	19	5	5	4	5	
2.	Moderately Integrated	9	3	4	1	1	
3.	Not fully integrated	13	8	5	-	-	
	Total	41	16	14	5	6	

Table 6- 6: Summary of stakeholder mining governance concerns in Nairobi

Table 6- 6: Summary	of stakeholder mining governance of	concerns in Nairobi
Well-integrated	Moderately integrated	Not fully integrated
Un-devolved functions of the national government authority or mining to the county level		Lack of classification of minerals into low and high categories in order to facilitate devolution of some minerals to counties (Mining)
Decommissioning of old mines has not been done	 2. Mining activities occur in water scarce areas hence there is no sufficient water for mining and sanitation 	Exclusion of county government participation and decision making in the mining sector (Mining)
Unfair exploitation of mineral resources with disregard to the interest of the local people		3. Inadequate mining information dissemination at the county level to guide investors (Mining)
4. Mining is done without partnership with the community and this increases violation of human rights		4. Most mining operations are controlled by outsiders (Mining)
5. The mining standards and conditions are set too low in order to attract investments withou adequately considering the protection of human rights	for sharing 10% of the royalties' allocation to the communities	5. Lack of a clear national resettlement framework and guidelines (Mining)
6. Inadequate public participation in EIAs	6. Government institutions responds more to issues raised by mining investors than to the local citizens	6. Inadequate and below value compensation (Mining)
7. Unsafe mining operations fo artisanal miners	7. Consideration of cultural factors in mining compensation and resettlement	7. Control of the mining sector by political elites (Mining)



8. Mine workers are poorly paid	8. NEMA has inadequate technical capacity to execute their mandate in the mining sector	8. Mining industry in Kenya is largely owned and controlled by cartels (Mining)
Child prostitution, school dropouts and child labour in mining areas	Loss of lives in abandoned, open and unsecured decommissioned mines	9. Poor coordination of lead government agencies in addressing pollution from mining at the local level (Environment)
10. Community not enlightened on land rights and resettlement rights		10. Lack of a clear mine inspection framework and guidelines (Environment)
11. Lack of mechanisms, framework and guidelines to carry out comprehensive mining site inspections		11. There are no mining radiation inspectors in the counties (Environment)
12. Un-informed consent by the communities in the mining sector		12. Non-rehabilitation or restoration of artisanal mines (Environment)
Communities living in mining areas need a certain threshold of information for decision making		 Corporate Social Responsibility (CSR) is not entrenched in the mining law (Environment)
14. Poor waste disposal/management by the mining companies		
15. Lack of effective mechanisms for regular monitoring the environmental status of mines (EAs not effective)		
16. Non-compliance in provision and use of Personal Protective Equipment's		
17. Cultural setting is a hindrance to women's participation in mining		
18. Mining requires a lot of water19. EIAs are not conducted on artisanal		
mining activities		



Plate 6- 3: Stakeholder consultations at Silver Springs Hotel in Nairobi



Nairobi had the lowest number of stakeholder concerns compared to Kwale and Kitui Counties. The difference could be attributed to the fact that this particular stakeholder cluster was composed of people who are conversant with mining issues around the country including a clearer understanding of the amended governance sector in the mining sector through the Mining and Minerals Policy 2016 and Mining Act 2016.

6.4: Summary of Stakeholder Consultation Findings

A comparison of the non-integrated governance issues according to the stakeholder indicated that Kwale County had the highest number of (16) followed by Nairobi (13) and then Kitui County (7). This can be attributed to the fact that more active mining was more common in Kwale County compared to Kitui County where mining is still at the early stages of development. Stakeholders in Kwale were also more familiar with various issues associated with the mining sector compared to those in Kitui. This includes the level of public awareness on the amended governance sector in the mining sector through the Mining and Minerals Policy 2016 and Mining Act 2016. The Nairobi cluster on the other hand comprised of different stakeholders associated either directly or indirectly with the mining sector and were therefore also familiar with issues arising from mining in different parts of the country included the recent amendments in the mining sector governance framework.

The findings showed that stakeholders in both Kwale County and the Nairobi cluster stakeholders had more genuine mining governance issues compared to those in Kitui County who were more speculative and appeared to have fears on possible effects that might arise from mining. This is attributed to the more experience in mining activities and exposure to challenges in the mining sector by the stakeholders in Nairobi and Kwale. Consequently, the Nairobi stakeholder cluster raised more issues on mining governance followed by Kwale and Kitui Counties. Similarly, most of the not fully integrated environmental governance issues were raised in Kwale County followed by the Nairobi cluster who are more experienced and the least number of issues in Kitui County where large-scale mining is yet to take off. On the other hand, more human right governance issues were raised in Kwale County which was attributed to the fact that mining is prevalent and widespread in the county compared to Kitui County. Consequently, the people in Kwale have more exposure and experience on mining issues compared to communities and stakeholders in Kitui, and were therefore in a better position to identify areas of human rights violations arising from the sector. The key cross-cutting governance gap issues identified by all the three stakeholder clusters are summarized in **Box 6-1**.

	Box 6-1: Summary of stakeholder governance gaps					
Mi	ning governance	En	vironmental issues	Hu	ıman rights	
1.	Land valuation does not consider value of minerals found on the land	1.	Lack of proper mine inspection mechanisms	1.	Corporate social responsibility (CSR) is not well engrained in the mining law	
2.	Lack of a mineral classification system to identify low and high-class categories to facilitate the devolved governance of some minerals to the counties	2.	Disaster unpreparedness	2.	Unfair compensation and resettlement of displaced communities	
3.	Mining Liaison Committees are not trusted by communities, are ineffective, and host communities are not involved in their formation	3.	Risk of social diseases such as STD, HIV/AIDS	3.	Inadequate resettlement of affected persons or community	
4.	The mining sector is controlled by different types of local and international cartels	4.	Inadequate capacities for environmental agencies involved in mining sector governance	4.	Lack of capacities of different agencies to enforce human rights in mining operations	
5.	Widespread illegal artisanal mining and non- decommissioning of artisanal mines	5.	Control of the mining sector by political elites	5.	Lack of political good will to advocate for the protection of human rights at the local level	



6. Lack of a framework to enable the participation of county governments in mining sector decision making	6. There are no mining radiation inspectors in the counties	6. Weak capacity by DOSHS to inspect mining areas and operations
7. Lack of proper coordination for agencies involved in mining sector governance	7. Poor coordination of lead government agencies in addressing pollution from mining at the local level	
8. Mining related institutional structures are yet to be put in place at the County level	8. Inadequate network of NEMA offices in the mining rich areas	
9. Control of the mining sector by political elites	9. Lack of a clear mine inspection framework and guidelines munities	
Exclusion of county governments in full participation and decision making in the mining sector	10. Lack of coordination between NEMA and WRMA on water resources management including demand and sharing by mining operations and other users	
11. Liaison Committees are not effective	11. Lack of information on the effects of mining related radiation on the environment and people	
12. Inadequate and unfair compensation of displaced communities	 Lack of restoration/rehabilitation of closed or decommissioned mining sites 	
13. Inadequate mining information dissemination at the county level to guide investors	13. Poor capacity for the monitoring of the effects of radiation in mining	
14. Lack of a clear national resettlement framework and guidelines	14. Non-rehabilitation or restoration of artisanal mines	
15. Lack of community participation in formation of Liaison Committees	15. Poor communication between NEMA and host communities after EIAs are undertaken	
 Lack of political goodwill and support by county and national government in the resettlement of displaced people 		

The governance gap issues raised by the stakeholders and not identified in the PPP analysis were:- a) widespread control of the mining sector by local and international cartels, b) inadequate capacity for mining governance agencies, c) lack of proper coordination for agencies involved in mining sector governance, d) lack of a national framework for compensation and resettlement of displaced communities, d) inadequate participation of county governments in the mining sector governance, e) ineffective Mining Liaison Committees, f) non-decommissioning of mines, and g) lack of proper mine inspection mechanisms. The difference could be attributed to a number of reasons, namely; a) poor administration of governance frameworks in the sector including implementation of policy, poor enforcement of laws, regulations and guidelines, and, b) almost all the governance instruments in the mining sector as evaluated in the PPP analysis are all new with the policy and legal framework having been introduced through the Mining and Minerals Policy 2016 and Mining Act 2016. The implication of this is that the full impact of the restructured governance framework in the mining sector is yet to be realized. Most of the stakeholder views were largely based on the previous frameworks including the Mining Act 1940 which enacted during the colonial times.

The following mining governance gap issues were identified in both the PPP analysis and stakeholder analysis which indicates the need to urgently address them:- a) risk of mining related conflicts, b) risk of public safety and health problems, c) risk of radiation exposure, d) likely spread of HIV/AIDS, and, e) inadequate CSR interventions. **Box 6.2** provides a summary of the gender issues raised by stakeholders **Box 6.3** provides a summary of the key barriers which limit public involvement in the mining sector.



Box 6.2: Summary of the gender issues raised by stakeholders

box 6.2. Suffillary of the gender issues raised by stakeholders				
Kwale County		Kitui County		
a) Sale of land involvement		knowledge or	a)	Lack of participation by women in community meetings to discuss land, mining, environmental
b) Gender di compensation		sharing land	b)	and social issues Likelihood of women being neglected or
c) Gender inequ	uality in land ownership m land title deeds	p - Women are		abandoned by husbands due to male engagement in large scale mining
d) Unequal ger Committees	nder representation i	in the Liaison	c) d)	Anticipated increase in single motherhood Women likely to be most affected by water
e) Increase in o	child prostitution and s iild	school drop-out		shortage and environmental degradation due to coal mining
	women in polygam men don't share		e)	Fear of sexual harassment and sexual exploitation of women in the mining areas
	pecially in polygamous f male labour in the mi		f)	Likelihood of single mothers being severely affected by relocation because they are landless
• ·	undue advantage ir	•		and will not benefit from compensation package
оррогшиниез		Roth :	\ \ros	

- a) Lack of participation by women in community meetings to discuss land, mining, environmental and social
- b) Unequal gender representation in the Liaison Committees
- c) Overworked women with minimal benefits in artisanal mining activities
- d) Role overload likely to lead to domestic violence and family breakdown as women are expected to carry out household work while they also engage in mining
- e) Artisanal mining involves hard labour making it difficult for women to cope
- f) Lack of women's voice in mining in decision making, planning and implementation
- g) Perception that women play a minor role in mining due to its manual nature and mining is generally seen as a male occupation Lack of guidelines for gender parity to enhance participation of women and gender equity in benefits sharing

Box 6.3: Summary of barriers to public involvement in the mining Sector

Public involvement aspect	Barriers to public involvement	Recommedation
1. Access to information	 Reports of mineral prospecting are not shared with communities and County Governments Values of minerals are not disclosed to the public Non disclosure on prospecting and mining agreements, ownership, mineral quantities mined, and mineral exports Limited geological information to the general public 	 Land valuation should consider value of minerals found on the land Mapping of all mineral resources in all counties and results of prospecting should be publicly disclosed



2.	Awareness of rights	 Mineral royaty sharing formular is not explicit or clear to the public There are no clear guidelines on gender rights in appropriaion of mining benefits CSOs should advocate against human rights abuses and violations in the mining sector Educational campaigns should target the disadvantaged groups such as women, persons with disabilities and the elderly Review the Mining (Community Development Agreement) Regulations, 2017 to adequately integrate the Bill of
3.	Awareness of roles	 No clear responsibility on resolution of land tenure and land access issues in mining areas Lack of a clear national resettlement framework and guidelines for mining sector Enhance the role of County Environmental Committees (CECs) to incorporate a cross-sectoral integration sub-committee including mining sector. Establish and gazette compensation and resettlement regulations at the local level as provided under Article 153(8) of the Mining Act 2016
4.	Adequacy of public consultation in mining EIAs	 Poor consultations between regulatory institutions on one hand and between such agencies and the local communities on the other; e.g inability gaps between NEMA and WRMA to resolve downstream water shortage on River Mkurumunzi in Kwale County EIA reports are too bulky and technical for local communities. Establish an inter-agency coordination mechanism at the County level to deal with environmental, social, economic and human rights issues in the mining sector The EIA reports should provide a non-technical summary containing all issues concerning the local communities in the mining areas NEMA should reach out to local communities by establishing offices nearer to the people and by improving staffing in their offices
5.	Public representation and involvement capacity	 Lack of capacity for local communities to effectively participate in the mining sector Artisanal and small scale miners (ASM) are not organised into institutions that can enable them market minerals resources more competitively Lack of a clear framework to enable the participation of county governments in mining sector decision making Lack of capacity and resources by various government bodies to enforce the laws relevant to mining Corganize artisanal miners into cooperatives Develop guidelines on how communities would be involved in the prospecting, licensing and mining. Re-classify mineral in schedules of the Mining Act 2016 into those to be administered by the national and county governments Strengthen the capacity of government lead agencies to undertake more effective inspections of mining activities
6.	Implementation of the Mining & Minerals Policy 2016 and Mining Act No. 2 of 2016	 Most of the aspirations of the policy and mining law exixt on paper but are not implemented on the ground Indaequate enforcement of the mining law especially regarding the compliance with EIA recommendations Poor coordination of the policy and mining law exixt on paper but are not implemented on the ground Indaequate enforcement of the mining law especially regarding the compliance with EIA recommendations Poor coordination between law enforcement agencies



7. GOVERNANCE CAPACITY ANALYSIS

In Kenya, a wide range of institutions are involved in the interface between, mining activities, environment and human rights. **Table 7.1** provides the institutional framework for the mining sector. An evaluation of the capacity status at the National Environment Management Authority (NEMA) and Directorate of Occupational Safety and Health Services (DOSHS) was undertaken in order to gauge the institutional capacity status on one hand and the level of institutional cooperation and partnership on the other in regards to the mining sector. The NEMA governance capacity assessment mainly focused on the administration of mining project EIAs including the EMP compliance up to the mine decommissioning stage. The capacity analysis was significantly affected by the reluctance by some of the institutions including the MoM to engage. Most of those who were willing to engage were reluctant to allow the institutional capacity weaknesses to be highlighted in the SESA report possibly for fear of subsequent reprimanding.

Table 7.1: Institutional framework for the mining sector

Institution	Pole in the mining sector
	Role in the mining sector
Ministry of Mining	The government ministry that oversees the Mineral sector in the country
Directorate of Geological Surveys	Acquisition, processing, storage, and dissemination of primary geological and mineral data and information
Mining Rights Board	Advising and giving recommendations in writing to the cabinet secretary on granting, rejection, retention, renewal, suspension, revocation, variation, assignment, trading, tendering or transfer of mineral rights
National Mining Corporation	state-owned company which handles joint ventures with the private sector
Ministry of Energy and Petroleum	Overall coordination of upstream and downstream oil and petroleum operations
Ministry of Environment and	Protection, conservation and management of the environment and natural
Natural Resources (MENR)	resources for socio-economic development
Directorate of Resource Surveys and Remote Sensing	Collection, storage, analysis, updating and dissemination of Geo-spatial information on natural resources to facilitate informed decision-making for sustainable management
National Environment Management Authority (NEMA)	Coordinating various environmental management activities being undertaken by the lead agencies
Directorate of Occupational Health and Safety Services (DOSHS)	Ensuring safety, health and welfare of all workers in all workplaces including mining areas
The Kenya Chamber of Mines (KCM)	Represents the interests of Kenya's miners, exploration companies, mineral traders, suppliers and professionals in the mining industry.
Association of Artisanal and Small-Scale Miners (ASM)	Representing the interests of artisanal miners around the country
National Land Commission (NLC)	Management of public land on behalf of the national and county governments
Water Resources Management Authority	The lead agency in water resources management in the country for all sectors including mining
Kenya National Commission for Human Rights (KNCHR)	An autonomous national Human rights institution with the core mandate of furthering the promotion and protection of human rights in Kenya

The SESA process undertook a comprehensive assessment of the governance capacity status in two of the above institutions, namely NEMA and DOSHS.



7.1: National Environment Management Authority (NEMA)

7.1.1: Systemic capacity

The capacity issues considered included; institutional public access, transparent and accountable issuance of permits and licenses, independent decision making, grievance resolution and timely service.

7.1.1.1: Public access

NEMA has categorized mining EIAs into medium (which include quarrying and artisanal mining activities), and high risk which includes all the more advanced forms of mining. The EIAs for these study reports are reviewed at the head office except for quarrying which are handled at the counties. As required by the law, NEMA has put in place diverse platforms to ensure there's public access to information on EIA studies done in the mining sector. These include the following; i) all EIA experts or firms are supposed to engage and consult adequately the public in the project environs and other relevant stakeholders as stipulated in EMCA, CAP. 387, ii) all EIA reports are supposed to be uploaded into the NEMA web site so that they are readily available to any interested parties, iii) use of the media to reach out to the public and other stakeholders about the report mainly through radio, Kenya gazette and popular local dailies, iv)allocating a 30 days window for the public to review the report and submit their input to NEMA, v) sharing the report with government lead agencies which might be affected by a mining project for instance the Kenya Wildlife Service (KWS), Kenya Forest Service (KFS) and Water Resources Management Authority (WRMA), and, vi) availing the EIA reports at their county offices where its available to interested parties , and, vii) holding public hearings facilitated by NEMA within the project location.

7.1.1.2: Transparent and accountable issuance of permits and licenses

EIA review by NEMA and issuance of an EIA license is process based. Each EIA study report for medium and high-risk mining projects is reviewed by a panel of 4 experts who make a decision on whether an EIA license should be issued or not. This is then followed by quality control through the following; i) EIA desk, ii) chief compliance officer, iii) deputy Director of compliance, iv) director, compliance and enforcement, and, v) director general (DG) for signature. There are also other factors which are taken in to account before a final decision is made on whether to issue an EIA license or not. Further, NEMA keeps a register of all EIA licenses, and, which are also available on-line in the website. All these processes are aimed at enhancing transparency and accountability in the EIA license issuance.

7.1.1.3: Independent decision making

As the lead environmental protection agency, NEMA administers the EIA process in all sectors including mining. However, it does this with input from other government lead agencies in sectors that might be affected negatively by a mining project as well as other non-government stakeholders. Although the final decision on issuance of a license lies with NEMA, the process is guided by input from NEMA and other stakeholders. The process also evaluates or examines the extent of statutory requirements which are critical in making the right decision. All this is important when making a decision on whether to issue or not issue an EIA license, and the conditions that must be associated with it.

7.1.1.4: Grievance resolution

Any issues arising from mining EIAs and issuance of an EIA license are resolved through two mechanisms; courts process and Zone of Possible Agreement (ZOPA) facilitated by NEMA. ZOPA entails NEMA bringing together the parties involved and mediate through dialogue. NEMA's decision on issuance of mining project EIA license is not final and any stakeholder can make an appeal to the National Environment Tribunal (NET). If any party is not satisfied by NET's decision, they can take the case to the Land and Environment Court and thereafter to the Court of Appeal. However, in some instances, the court process is rather slow which delays grievances resolution. This can be partly remedied by fast tracking the court process and ensuring that the EIA process and issuance of an EIA license is done comprehensively and in an all-inclusive manner to avoid circumstances that will create grievances.



7.1.1.5: Timely service

NEMA has put in place specific timelines for handling different aspects of the EIA process and issuance of an EIA license. Before a mining project EIA study begins, the proponent and consultant submit to NEMA the EIA study Terms of Reference (ToR), which are supposed to be approved in 7 days. This process evaluates the adequacy of the ToR and the expert's work-plan. After submission of the study report, NEMA gives a 30 days review window during which the public and all stakeholders are expected to submit their input. Within the same timeframe, NEMA facilitates and holds a public hearing of the study within the project environs. Thereafter, issuance of an EIA license for medium risk mining projects takes 30days while that of high risk projects takes 60days

However, these EIA process timelines are faced by a number of challenges namely; i) lack of feedback or input on the EIA study report from relevant government lead agencies, ii) political interests and interference for high profile mining projects, iii) inadequate and even misinformation by the EIA study experts occasioned by influence from the proponent, and, iv) insufficient EIA personnel capacity at NEMA head office where medium and high-risk project EIAs are handled. These can be addressed by; i) de-politicizing mining project EIAs and decision-making process, ii) instilling professionalism in EIA experts to avoid manipulation by proponents, and, iii) increasing the number of EIA reviewers and ensure they are skilled and competent enough to handle mining EIA study reports.

7.1.2: Institutional capacity

The institutional capacity issues evaluated included; budgets, funding and expenditure, transport, information communication technology (ICT), incentives, personnel capacity, and, emergency response capacity.

7.1.2.1: Funding, budgets and expenditure

Unlike in the recent past, NEMA is currently funded by the government. Approximately 10% or Ksh. 80million/year of the budget is allocated for administration of EIAs which is inadequate to meet the needs of this process. It therefore slows down timely handling of the EIA process and delays issuance of EIA license for mining projects and other sectors as well. This challenge needs to be addressed by allocating more funds to NEMA and as well as the EIA section to enable it handle the EIA process effectively and timely.

7.1.2.2: Transport

NEMA services have been devolved to all the 47 counties as stipulated in the country's constitution, and each has been allocated one vehicle. However, the EIA section at the head office has not been allocated any vehicles and instead shares the pooled vehicles with all the other departments and sections. This has been occasioned by inadequate funds to buy enough vehicles to meet all the transport needs of each department and section. This hamper timely inspection of mining project sites where EIA studies have been done which is a requirement for the EIA report review process, and also delays the EIA report review and issuance of an EIA license. Inspection and monitoring of mining projects for compliance with the EMP and EIA license conditions is also hampered. Accordingly, allocating adequate funds to NEMA will enable it to improve its transport capacity by buying enough vehicles to facilitate these important EIA and environmental management activities.

7.1.2.3: Information Communication Technology (ICT)

All the departments in the NEMA head office are linked through an ICT system but there is no linkage with the county offices. Thus, most of the operations and information sharing including EIA reports processing at the head office is done easily using the system. Key information about NEMA is also readily available in its website where the public can access and download it. All EIA reports even those for the mining sector are submitted on line and this has partly enhanced NEMA's capacity to handle and manage its mandate of processing EIA licenses for the mining sector. EIA licensing process is automated only at the head office and not at the counties which constraint service delivery. To enhance service delivery, the ICT capacity needs to be

improved so that it can cope with the increased operations of the authority in response to increasing environmental management oversight in the country. The head office should also be linked to the county offices for faster operations, information communication and tracking for timely and effective service delivery.

7.1.2.4: Emergency response capacity

NEMA has put in place an emergency response unit to deal with environmental disasters-the Rapid Environment Response Unit (RERU) based at the head office. This unit comprises of inspectors who are trained to respond and handle environmental disasters even those associated with the mining sector. The underlying constraints faced by the units are mainly the following; i) the unit is only found in Nairobi, which means NEMA county offices have no ability or capacity to respond to any environmental disasters arising from mining projects and associated activities, ii) lack of inadequate tools and equipment to evaluate and manage environmental disasters, and, their mobility capacity is low and are therefore ill equipped to effectively respond to disasters in remote and far places within the country.

7.1.3: Personnel capacity

This capacity assessment component mainly concentrated on the number of personnel, education, skills and competences as well as work incentives, and the findings are herein outlined.

7.1.3.1: Number of personnel

As stated earlier, medium and high-risk mining EIA study reports are reviewed at NEMA's head office. Currently, the EIA section has 20 reviewers with only 5 having ability to effectively review mining EIAs. However, these are too few to handle all the EIA review work, and at the same time handle other EIA report review processes like field site visits of each project. Ultimately, this may delay the review process and timely issuance of an EIA license as stipulated in the service charter. Since NEMA is currently operating at a third of its staff requirement, there is a need to recruit more competent EIA reviews with diverse skills including handling mining EIAs so that the total number is 60.

There are 47 environmental inspectors i.e. 1 per county, and 30 at the head office. Although the officers have the required skills and competence to inspect environmental compliance in the mining sector, they are too few to cope with the diverse environmental management issues they are expected to handle in all sectors of the economy. There is also the challenge of transport availability to carry out timely and regular inspections for monitoring compliance with the EMP and EIA license conditions. These setbacks are likely to lead to rampant environmental damage and violation of human rights for communities living in the immediate environs of mining projects. Recruitment of more inspectors is recommended so that NEMA is able to effectively monitor and adhere to the EMP and EIA license conditions by mining projects. For the EIA section to be more effective, it should be made a sub-department within the compliance and enforcement department and be headed by a Deputy Director.

7.1.3.2: Education, skills and competences

All the 20 reviewers in the EIA section are graduates with most of them having postgraduate degrees at Masters and PhD. Five (5) of the 20 reviewers have the required skills and competences to effectively handle mining EIAs. NEMA has also trained them using the EIA reviewer's guidance manual which has further enhanced their review ability and decision-making capability. However, in case of a very complex EIA study report, EMCA has empowered the Director General (DG) to form an interdisciplinary Technical Advisory Committee.

7.1.3.3: Incentives

Generally, NEMA has been experiencing a high staff turnover including those in the EIA section at the head office. As noted during the capacity assess, this could be partly attributed to the working environment provided by the authority including availability of staff incentives, and it's likely to undermine provision of services and overall delivery of its mandate. In particular, the current incentives for the staff include; i) short and long-term training opportunities, ii) extraneous allowance, iii) medical cover, and, iii) reviewers allowance

specifically for the EIA experts. Low retainance of EIA reviewers will erode the high-quality skills and competences the authority will have nurtured and may compromise quality review of mining EIAs. It is therefore important to assess whether the working environment in NEMA could be responsible for the staff turnover with a view of mitigating the same effectively so as to retain suitable and high caliber staff. There is also a need to put in place a mechanism to cushion EIA reviewers from blame arising from their decisions.

7.2: Directorate of Occupational Safety and Health Services (DOSHS)

7.2.1: Systemic capacity

DOSHS capacity issues that were evaluated were similar to those of NEMA and included; institutional public access, transparent and accountable issuance of permits and licenses, independent decision making, grievance resolution and timely service. These findings are outlined in detail herein.

7.2.1.1: Public access

Employers including those in the mining sector are supposed to document and report to DOSHS all OSH accidents, injuries and health incidences. However, there's currently no Information Technology Communication (ICT) linkage between DOSHS and mining work places, and as such documentation of incidences is done manually through paper work. Further, due to understaffing and inadequate computer facilities, most of this data and information is not readily synthesized and analyzed. Accordingly, public access to information and data on prevalence of accidents and health issues in the mining sector is not possible. DOSHS has also not created a mechanism to document incidences among artisanal miners, and therefore accidents and injuries in this informal mining sector are again not readily available to the public.

This situation is a setback in ensuring the public readily accesses OSH service related issues in the mining sector. Some of the measures that can be used to correct the situation includes; i) improving DOSHS ICT system and ensure its linked to all the county offices and mining work places for easy and fast recording and documentation of accidents and injuries, ii) increase DOSHS staff to enable the authority discharge its mandate on time and effectively, including information sharing with the public. This should be augmented by posting data and information on mining accidents and injuries data on their website, and, iii) increasing the number of computers for timely, effective, and efficient sharing of information with the public. There's also an urgent need to create a system for reporting and documenting injuries and accidents among artisanal miners since the new mining law has recognized them to be important players in the mining sector.

7.2.1.2: Transparent and accountable issuance of permits and licenses

DOSHS normally issues a number of permits and licenses in all sectors, the mining sector included namely; i) work place regulation certificate, ii) industrial certificates for equipment and plants like; boilers, rifts, cranes and refrigerators and, iii) annual work place compliance certificate. The procedure, requirements and timeline for issuance of these permits and licenses is readily available in the DOSHS website. Each application is evaluated by an inter-disciplinary team of technical staff in consultation with the Director against the set requirements and standards. Mining work places or any other work place which meet these requirements and set standards are issued with a permit or license applied for. This system has been put in place to ensure the process is conducted with the highest possible level of transparency and accountability.

7.2.1.3: Independent decision making

DOSHS is the lead government agency in-charge of preventing and reducing prevalence of OSH issues in in the mining sector as well as other sectors especially in the formal sector like factories, industries and large-scale farming enterprises. In this regard, issuance of operating licenses and permits for mining work places and subsequent inspection for compliance purposes are made entirely by the authority independently as mandated by the law without any reference to other government lead agencies.



7.2.1.4: Grievance resolution

OSHA (2007) has provided guidelines on how to resolve OSH related grievances, and all employees in the mining sector are supposed to report issues such as accidents, injuries and serious health issues in their work places to any DOSHS office. However, aggrieved employees are free to report to any DOSHS office for redress. Redress for such cases begins by undertaking a detailed inspection of the workplace by DOSHS technical staff where the incidence occurred. Care is taken to avoid disclosing to the employer on the purpose of the inspection to avoid victimization of the employee(s).

However, there is no timeline set for resolving grievances, which means those aggrieved normally wait for too long before their cases are resolved. Another constraint is that DOSHS has very few technical staff to undertake inspection and investigations that are needed to help resolve employees' grievances coupled by the fact there are very few vehicles for timely inspection of workplaces where employees have forwarded their complaints to DOSHS. Given this situation and the increased mandate bestowed on DOSHS, resolution of OSH grievances in the mining sector will be greatly hampered. Further, if a decision is made to compensate an aggrieved employee(s) by a mining company, DOSHS has no authority to compel such companies to honor their decision.

Some of the measures that can be used to ensure timely and effective grievance resolution are namely; i) setting a specific time frame for redress and resolution of reported cases, ii) enhancing DOSHS technical staffing level, and, iii) empowering DOSHS to have prosecutorial authority over mining companies that have refused to compensate affected employees.

7.2.1.5: Timely service

Like other government service delivery agency, DOSHS has put in place a citizen service charter framework which is readily available in the website. For instance, a certificate of registration of new or existing mining work places within a formal set up is done annually, and the process takes 30 days while monitoring of such places for levels of pollutants and other contaminants takes 30 days as well. Investigation of OSH related complaints in mining areas and companies is supposed to be done within 30 days while work injury evaluation takes place within a time of 15 days. In case a mining worker is injured in the work place, processing of benefits and issuance of a demand note to the company is done in 15 days.

However, due to understaffing and lack of enough DOSHS offices in the country, provision of these services on a timely basis is hampered. Moreover, as the mining sector expands, the demand for the services will also increase and at the current staffing, the directorate will increasingly become ineffective in meeting its mandate.

7.2.2: Institutional capacity

The main aspects that were assessed under this component included; budgets, funding and expenditure, transport, information communication technology (ICT), incentives, personnel capacity and emergency response capacity. The findings of this evaluation are herein outlined.

7.2.2.1: Funding, budgets and expenditure

Currently, DOSHS gets is finances from two sources; the OSH fund through an annual contribution of Ksh 3,000 for each registered work place, and, the national government. About Ksh 60.7 million was collected through the OSH fund during the 2015-216 financial years, with the government allocating Ksh. 150 million, while in the 2016-2017 it was allocated Ksh110 million for operation costs although its annual average financial budget is about 480 million. The directorate is consistently underfunded, and this has greatly hampered its operations and capacity to discharge its oversight mandate in the mining sector.

For instance, in the 2016-2017 financial years, only Ksh 32.6 million was allocated for inspection purposes for all sectors including mining from the operations funds allocated by the government, which was supplemented with Ksh. 6 million from the OSH fund. The amount is inadequate to meet all the stipulated DOSHS inspectorate services in the mining sector. This will lead to many employees in mining companies and

artisanal miners working in unsafe and unhealthy environments. There's also a likelihood of mining companies and artisanal miners developing a non-compliance culture. This challenge should be addressed by allocating adequate funds to DOSHS so that it can effectively and adequate ensure mining companies and artisanal miners comply with all the OSHS management laws and regulations. Making the directorate semi-autonomous can also go a long way in making it more responsive and effective in management OSH matters in the mining sector and other sectors as well.

7.2.2.2: Transport

Only 11 vehicles are currently available for use by DOSHS in the entire country with the head office in Nairobi having one vehicle, and, the rest, 10, have been allocated to the 29 DOSHS county offices including Naivasha sub-county. Transport services are required for; i) inspection of mining work places and follow up of annual audits, ii) investigation of mining related accidents and injuries, iii) mining work place hygiene surveys, and, iv) general DOSHS transports needs. However, due to transport inadequacy in the directorate, mining sector inspectorate services will be significantly hampered leading to the following; i) inadequate inspection of work places for compliance purposes, iii) development of a non-compliance culture among artisanal miners and mining companies, and, iv) inadequate and untimely response to employees and artisanal miner's complaints arising from their work places. This situation will create poor working environments for mining workers, and also violate their human rights. Accordingly, improvement of transport capacity is required, and this can be achieved by allocating sufficient funds to the directorate.

7.2.2.3: Information Communication Technology (ICT)

The entire directorate has 30 functional computers, and most of them are almost obsolete in their usage and functional state. Consequently, it lacks a good and effective ICT information management system, and whatever is in place is too rudimentary and limited in its capacity and usage. There's no linkage in DOSHS head office sections or between the head office and county offices and mining companies. Thus, communication of vital OSH service information and data is done manually through paper work instead of a modern ICT system. In some cases, the data and information is stored in staff personal computers which raises concerns on its safety, and, generally its storage is poor since it's mostly in hard copies. This situation makes the directorate ineffective in its in-house operations among the staff, and between it and mining companies; which is a constraint in provision of timely and effective inspectorate services to the mining sector.

7.2.2.4: Emergency response

DOSHS doesn't have an emergency response mechanism for any OSH disasters in work places associated with the mining sector or other sectors. These services are handled by the Disaster Response Unit (DRU) under the Kenya National Disaster Operation Centre (NDOC). This situation is occasioned by the fact that the directorate focusses more on prevention of work places OSHS issues. However, as the mining sector and other sectors expand, it's necessary to put in place an emergency response unit and mechanism to deal with OSHS disasters but tailed to deal with sector specific issues.

7.2.3: Personnel capacity

The total staff for the entire DOSHS is 119 out of an expected establishment of 375. Fifty-eight (58) of them are technical officers out of an expected or targeted 123 officers, and the rest are 61 support staff. The technical staff comprises of; 8 Doctors, 3 Nurses, 2 Lab technicians, and, 45 OSH officers, who have the required ability to handle and manage diverse OSHS issues including monitoring radiation risks associated with the mining sector. However, since Kenya's mining sector is still under developed, they lack adequate exposure to OSHS issues specifically associated with mining, and this needs to be addressed through training and exposure within and outside the country.

These statistics also show that the directorate is highly understaffed, and it can't effectively execute its inspectorate functions in the entire country. In particular, there's an acute shortage of personnel with ability to oversee OSH matters in the mining sector. Another notable short coming is that the directorate currently lacks non-ionizing radiation monitoring equipment which is a setback in enhancing capacity of the staff to handle

radiation matters associated with some of the mining projects. Acquisition of this equipment is therefore important to ensure the required diverse capacities in DOSHS are sustained.

7.2.3.1: Education, skills and competences

The technical staffs in DOSHS have high education, which is dictated by the set education requires for each position. All the doctors have a Bachelor's Degree on medicine, and some of them have attained Masters Degrees in different areas of specialization while the nurse has a Bachelor's Degree in nursing. All the OSHS officers have a Bachelor's Degree in various disciplines e.g. Zoology, Biochemistry, Botany, Physics, Chemistry and Environmental sciences. Among the lab technicians, one has a diploma and one has a BSc. Degree.

Apart from these basic education levels, all the technical staff have been trained and exposed to different OSH aspects to equip them with important skills and competences to enable them handle and manage OSH problems in different types of work places including the mining sector. But due to the under developed nature of the country's sector, they lack adequate exposure, skills, knowledge and competence to effectively deal with mining related OSHS issues. This needs to be mitigated through training and exposure within and outside the country.

7.2.3.2: Incentives

There are a few staff incentives such as medical cover and training opportunities but the latter are hard to come by. Currently, training of technical staff is being done by the Kenya Petroleum Technical Assistance Program (KEPTA) in preparation for the expected OSH issues in the emerging petroleum industry in the country. Generally, the directorate lacks appropriate incentives and good working conditions that are necessary in staff retention and attraction of high caliber, skilled and competent staff. This situation is likely to hamper management of OSH issues in the mining sector and there's a need to address it appropriately.



8. ENVIRONMENTAL MANAGEMENT AND MONITORING PLAN

8.1: Environmental Scenario Analysis

The SESA process attempted to undertake environmental scenario building for the mining sector in Kenya based on the indicators and targets in **Section 3.5**. **Box 8.1** provides the environmental and social scenario analysis for Kitui County. **Box 8.2** provides the environmental and social scenario analysis for Kitui County. The scenario analysis was mostly based on findings from the field missions and stakeholder consultations. In some cases, the scenario analysis reflected some deviations from the findings in the PPP analysis. The difference was interpreted to mean that for any reforms in the mining sector to be effective, they must be supported by adequate capacity for policy implementation and enforcement of mining law and regulations. **Box 8.3** provides a summary of alternative mining governance approaches and tradeoffs.

Box 8.1 Summary of environmental and social scenario analysis for Kitui County

Indicators Without Mining With Mining			
Environment	Illuicators	Without Milling	With Finning
Environment Biophysical indicators	Clean and healthy environment	Clean and healthy environment prevailing in most areas as the natural ecosystems are still functioning reasonably well	Not guaranteed owing to the environmental destruction by mining companies and pollution from extraction, transportation and processing of coal
	Noise and vibration	Largely absent as mining of coal has not began	Expected to increase beyond the set limits depending on the efficiency of machines used for mining coal
	Air quality	Good as there are no air polluting industries	Air quality will be compromised by smoke and dust emitted from mining operations
	Protection of environmentally sensitive areas such as forests, wetlands and wildlife reserves	Protection and conservation is significant. Tsavo East National Park, Kitui South Game Reserve, and Kara National Reserves under protection	The rivers that sustain biodiversity in protected areas could be polluted and most of the water abstracted and diverted to mining settlements and operations
	Pollution control	Mostly farm based and urban settlement sources of pollution from soil erosion, fertilizers, sewerage, and solid waste	Mui Basin is one large ecosystem and would be nearly impossible to control pollution once coal mining begins. There may be a need to establish a Mui basin Authority under the County Government to put in place Environmental Safeguards before commencing coal mining
	Rehabilitation and restoration of all mining sites	Not significant as most of mining activities are open cast quarries at small scale	This is provided in the mining guidelines but the mechanisms for enforcement are not in place
	Rehabilitation and restoration of degraded wetlands and forests	Most rivers in the Mui basin are seasonal and the County government is controlling sand harvesting to maintain the integrity of the drainage system	There is need to strengthen WARMA operations and support for County Environmental Committees, WRUAS and CFAS before the onset of coal mining in Mui Basin. Currently the mining potential has been delineated in Blocks but there is need to gazette areas where mining should not take place even if there are deposits as a measure to safeguard critical ecosystems such as forest and wetlands
	Effective EIAs	EIAs are not fully effective in safeguarding environmental and	There should be developed special guidelines for conducting EIAS for Coal, Oil and other Hazardous minerals to ensure social and



		social well-being of Mining	environmental safeguard for the areas where
	Follow-up environmental audits	communities in Kitui There is limited follow up on EAs	such deposits occur The County Environmental Committees and the proposed 'Mui Basin Development Authority should follow up on Environmental Audits and implementation of EMMPs
Social indicators	Public access to mining project information	Information is limited and people are in conflict with prospecting companies due to lack of information on minerals, land value and resettlement plans	The mining Liaison Committees are not effective in information dissemination and in the Event of Mining the National Government should partner with the private sector and Civil Society organization in awareness creation and information dissemination in Mui basin
	Public participation	This is not adequate and only involves the leaders	Public participation should be enhanced to include all households as individual households will be affected differently by mining operations
	Acceptable resettlement plans	There are no plans that have been presented to the people by government and only rumors are doing rounds due to lack of a resettlement plan and framework	A specific and comprehensive Resettlement plan for Mui Basin should be develop that will take into consideration all social, economic and demographic issues of the area
	Sustainable solid waste management	Only evident in urban settlements but not sustainable	There is need for a solid waste Management plan to be drawn under EMCA and Public Health Act well before the onset of full scale mining
	Equitable sharing of natural resource benefits	Benefit Sharing Agreements (BSA) have not been drawn either at the County level or even at the community level	The resettlement plan should be accompanied by a BSA identifying continued benefits to be accrued by those displaced from their ancestral lands and Benefits for those who will not be displaced but will continue to bear the blunt of mining disturbances and disruptions of their lives
	HIV/AIDS control	Taking place at the health facilities and awareness through the chiefs but infections are very prevalent due to high incidences of poverty in the area	The influx of people to the mining areas will increase and there is need to prepare to protect the community from new infections through enhanced awareness on HIV AIDS, establishment of protective health facilities, screening and post infection treatment services
	Corporate and social responsibility and accountability	CSR is not well structured and the little benefits are usually for persuading the community to enter into more often skewed deals that disenfranchise the community their resources by mining companies	CSR obligations for mining companies should be entrenched in the Benefits Sharing Agreements and should be a certain percentage of the declared profits by the mining companies
	Peace and security	Prevailing but compromised by prolonged droughts that create tension over water and grazing pasture between the Akamba and Somali Communities	The <i>Nyumba Kumi</i> security initiative should be enhanced among other conflict resolution mechanisms between ethnic groups and between communities and mining or prospecting companies



Human rights			
Rights and fundamental freedoms	 Right to life (accidents) Equality and freedom from discrimination Human dignity Freedom of conscience, religion, belief and opinion Freedom of expression Access to information Freedom of association Protection of right to property 	 Threat of heat waves and radiation from underground in the Mui Basin Women are discriminated against in property ownership and access to benefits from compensation Cultural lineages among the Akamba of Kitui are still strong and respected. Resource (coal) politics have divided the people between those advocating for resettlement and those who wants the status quo There is poor access to information on mining from all quarters including government 	There is need for awareness creation, training on the national human rights statutes and advocacy at various levels. This can be done through a partnership between the County Government and CSOs
Environment rights	Right to a clean and healthy environment	This right is not adequately protected as the mining prospecting companies operate with abandon even in view of their responsibility under EMCA 1999, Public Health Act, and County legislations	 EIAs will be conducted for all independent mining projects or operations before commencement EAs will be conducted on regular basis after commencement of operations
Economic and social rights	 Right to standard of health Right to proper housing, Right to reasonable standards of sanitation Right to clean and safe water Right to social security Right to education 	 There are no observed monitoring programs for environmental impact to health The VIP latrines are the most common forms of sanitation in Mui Basin Fundamental rights to social security are compromised by mining companies through alleviation from land Right to education is evident from the number of schools observed but not guaranteed due to abject poverty prevailing in the basin 	Advocacy through CSOs
Fair administrative rights	 Right to fair expeditious, efficient, lawful, reasonable administrative action Right to information access 	There is poor access to mechanisms of fair administrative action	Strengthening of community based institutions, representation, inclusion and participation in decision making on mining



Box 8.2 Summary of environmental and social scenario analysis for Kwale County

Box 8.2 Summary of environmental and social scenario analysis for Kwale County			
	Indicators	With Mining	With mining sector governance reforms
Environment			
Biophysical indicators	Clean and healthy environment	People living in mining areas such as around Base Titanium people complain of health problems from radiation and water pollution	Monitored and timely action taken through various institutions that govern environmental integrity (NEMA, CEC, CSOs, County Assembly)
	Noise and vibration	This has increased from machines, trucks, and explosives	Effective compliance monitoring
	Air quality	This is compromised by dust emission in some areas such as the Calcium mines	Effective compliance monitoring
	Protection of environmentally sensitive areas such as forests, wetlands and wildlife reserves	 There is no adequate protection as rivers have been dammed and polluted thereby modifying the ecosystem negatively Wildlife dispersal areas for the Simba Hills National Reserve has been taken over by mining and this has increased human wildlife conflict in Nguluku area 	Advocacy by CSO and communities using monitoring data
	Pollution control	There is a claim of pollution control from Base Titanium Management but the community complain of water pollution that has decimated fish from Mkurumunzi river and contaminated water for domestic use	Litigation using monitoring data
	Rehabilitation and restoration of all mining sites	There are very many open cast mines in Kuranze Ranch, Silica Sand mines, and no evidence of rehabilitation or restoration. However, some evidence of restoration observed at Coast Calcium	Development of mine rehabilitation plans under the Mining Act 2016 and guided by the relevant regulations and also EMCA 1999
	Rehabilitation and restoration of degraded wetlands and forests	No evidence of restoration and pressure is building on the remaining pockets of forests and wetlands	Advocacy by Conservation CSOs and downstream communities who benefit from the ecosystem services associated with the degraded areas
	Effective EIAs	EIAS are a mechanism of getting approval to do mining. However, EMP compliance monitoring is not implemented and the anticipated potential impacts have escalated in both large-scale and artisanal mines visited	EIAs should be channeled through County Environmental Committees before approval
	Follow-up environmental audits	EAs are done as routine but not with the objective of improving environmental conditions	County Environmental Committees which should be funded by County governments to enable them prosecute Environmental related cases at the County or inter-county levels
Social indicators	Public access to mining project information	There is selective dissemination of information. Information on pollution and radiation is closely guarded secret from the affected community	County Assemblies should legislate to empower County Environmental Committees to access and demand specific environmental information for all entities in the Counties
	Public participation	There is adequate public participation but the local communities complain of inadequate inclusion due to their lack of qualifications to secure jobs from mining companies eg Base Titanium	For the purpose of Environmental Governance the public should be defined in the context of youth, women, leaders, ward administrators, MCAs, Members of National Assembly, Environmental Committees



			Farmers, miners, fishermen with specific
			thresholds for representation and consultation
	Acceptable resettlement plans	 Those displaced from Nguluku to give way for bas Titanium Mining operations were settled in unsuitable areas. The resettled communities were bitter about the company since it had not fulfilled the promises they had made with regard to setting up social amenities such as children's education colleges, accessible modern roads, electricity and water availability to the resettled communities. Nothing much had happened–much of the land (50%) that was to compensate the community was submerged in water (Bwiti areas) 	The following frameworks should be used to guide, assessment, implementation and closure of resettlement for those displaced from mining areas. a) The Resettlement Policy Framework (2016); National Agricultural and Rural Inclusive Growth Project (NARIGP). This framework has been prepared by the Ministry of Devolution and Planning b) Resettlement Policy Framework (2007); Regional Communications Infrastructure Program This Framework has been prepared by the World Bank. c) The honors be implementation should be bestowed to the County Governments
	Sustainable solid waste management	This is evident at Base Titanium	Integrated coordination by NEMA, Public Health, DOSH, County Government, Community representatives, mining companies and Environmental Committees
	Equitable sharing of natural resource benefits	The current mechanism of sharing mining royalties goes to the national Government but does not trickle down to the County government (20%) and the community (10) as stipulated in the Mining Act due to lack of an effective structure for sharing the benefits	 The Mining Act 2016 should be amended to take more resource to the community and County governments so that they can have the capacity to manage the social and environmental impacts from mining operations CSOs should advocate for this amendment Management and control of mining operations should be devolved to County Governments
	HIV/AIDS control	There are awareness mechanisms in place but HIV is spreading fast in remote mining settlements due to sharing of partners	There is need for mobile health units specifically to serve mining settlements which are mostly located in remote areas
	Corporate and social responsibility and accountability	Coast Calcium has established where free education id offered. Same with Base Titanium but it was difficult to quantify the CSR benefits as a proportion of the mining profits due to lack of information d	Best practices should be acknowledged by the Government
	Peace and security	The community are not in harmony with Base Titanium as they claim that the promises of resettlement were not honored	Liaison Committees should be empowered as negotiating entities and be linked to trade unions through County subsidiary legislation
Human rights Rights and fundamental freedoms	 Right to life (accidents) Equality and freedom from discrimination Human dignity Freedom of conscience, 	The Mining Companies and the government have not ensured access to these rights dues to lack of a structure for representing the interests of the host communities to the national and County Government of Kwale	 National Human Rights Commission should have representation id Environmental Committees Human rights reporting should be added in the structure of Environmental Audits



	religion, belief and opinion Freedom of expression Access to information Freedom of association Protection of right to property		
Environment rights	Right to a clean and healthy environment	This is not guaranteed by the current state of affairs	County Environmental Committees should work with Labor inspectors to conduct joint mines inspection missions in the Counties
Economic and social rights	 Right to standard of health Right to proper housing, Right to reasonable standards of sanitation Right to clean and safe water Right to social security Right to education 	There are attempts to offer these rights but the standards have not been set	These rights should be interpreted and quantified in the Benefit sharing agreements and indicators of those rights listed in the agreements for the purpose of monitoring
Fair administrative rights	 Right to fair expeditious, efficient, lawful, reasonable administrative action Right to information access 	These rights are selectively allowed to the communities and County Government of Kwale	These rights should be preconditions of renewal of licenses and access to the mines. The County Government should invoke and license of access to the mines through legislation while the national government issues the licenses for operations

Box 8.3: Summary of alternative mining governance approaches and trade-offs

	box 6.5. Summary of alternative mining governance approaches and trade-ons					
M	ining Governance Issue	Alternative approach/Tradeoff				
1.	Prospecting licenses and	These documents should be filed at the County registry in the County where mining				
	mining Agreements	will take place before commencement of activities				
2.	Legal support for	The County where the mining host community is resident and the Law Society of				
	communities negotiating	Kenya should be involved in the negotiations				
	with mining companies					
3.	Definition of a community	The mining host community should be defined by all households located within a				
	for the purpose of	gazette drainage basin within which mining potential or actual mining takes place				
	receiving mining royalties					
4.	Determination of %	This should be informed by the following:				
	mining loyalties to be paid	a) Economic Value of Ecosystem services disrupted by mining per annum				
	to the County	b) Declared Profits made by mining companies				
		c) Estimated cost of managing the impacts such as health, infrastructure, waste				
		management, informal settlements, conflicts, and lost opportunity costs to				
		mining				
5.	Artisanal mining	Gazettement of areas for artisanal mining category where the overall mining license				
	operations	is issued to Artisanal Miners Cooperative Society and the society further grants				
		members mining access to the gazette areas in order to make artisanal mining self-				
		regulating				
6.	Dissemination of	All Mining related EIA approvals to have a training requirement component where				
	knowledge for	communities in the project are trained on Safety and Health before an EIA license				



occupational Safety and	is issued to the proponent. The cost of the training to be met by the proponent and
Health	the training oversight to be provided by DOSH
7. Coordination of mining	Consider devolving the governance of all mining activities except for that of Oil and
activities	Gas
8. Human Rights	All labour and factory inspectors to be trained on Human rights assessment and
Assessment	reporting. All labour inspectors in the Counties to be coopted into County
	Environmental Committees
9. Resettlement	Develop a standard resettlement package for all land owners displaced by mining
Compensation Scheme	activities. Assets to be valued and paid as additional package to the standard
·	package.
10. Land displacement to give	Each displaced household to have a given shareholding stake in the mining concern
way to mining	commensurate with the size of land taken from them by mining
11. Liaison Committees	To be elected from among the community living within the drainage basin gazette
	for a given mining operation so as to be familiar with current and long-term issues
	affecting the mining host communities
12. Capacity for the local	Every Mineral Rich County should establish a mining vocational training college to
community in mining	transfer the skills necessary for the local communities to participate fully in the
areas	mining operations taking place in their areas. The facility development to be funded
	by the ministry of mining
13. Cooperate Social	CSR to be legally defined in the Benefit Sharing Agreements and to take the forms
Responsibility (CSR)	of: water supply, provision of health services, development of education facilities
	and scholarships, rural infrastructure in forms of roads, markets, police stations,
	social halls etc
14. Environmental Monitoring	To be spearheaded by County Environmental Committees (CECs) to co-opt; County
and reporting	government, faith based organizations, CSOs, CBOs, Citizen groups e.g KEPSA and
	Academia
15. Gender protection	All benefit sharing agreements between the mining Companies and host
·	communities to have a clause on Nondiscrimination and sexual harassment
	protection policy
15. Gender protection	communities to have a clause on Nondiscrimination and sexual harassment

8.2: Management and Monitoring Action

The aim of the Environmental Management and Monitoring Plan (EMMP) is to recommend in detail the actions required to effectively implement the mitigation measures and alternative options for the environmental obligation gaps identified and recommended in the SESA as highlighted in **Section 4.3.1.2**, **Section 4.4.2.2** and **Section 6.4**. These actions are necessary in order to:- a) alleviate or minimize the risk of negative environmental and human right impacts in the mining sector which might originate from the un-integrated obligations in the sector governance framework as identified in the PPP analysis, b) alleviate or minimize the risk of negative environmental and human right impacts in the mining sector which might originate from the un-integrated obligations in the sector governance framework as identified by the stakeholders, and, c) support the long term management and monitoring of the environmental and human rights in the mining sector. It is important to note that an EMMP is a living entity in that it is to be updated and amended as new information (e.g. environment and human rights data), new policies, legal frameworks, regulations, guidelines, national strategies and action plans including the ratification of additional international agreements.

The SESA has prescribed applicable mitigation measures for mining sector governance areas with a potential for negative environmental and human right impacts emanating from un-considered obligations as identified in the PPP analysis and stakeholder consultations. It has also recommended specific, effective, tangible, simple and straight-forward management actions for each of the mitigation measures and alternative options. These can be considered as the direct environmental management prescriptions which will deal with the problems identified in the governance framework for the mining sector. Nonetheless, it's important to ensure these actions are implemented to ensure the existing environmental and human right weaknesses are addressed effectively. Each action is given a reference number for easy implementation,



and the recommended actions are measurable and are therefore easy to monitor and document. The monitoring frequency and indicators have been recommended for each management action. Regular monitoring using the recommended indicators will indicate the level of progress with regard to ensuring environmental sustainability and protection of human rights in the mining sector.

8.3: Environmental Management and Monitoring Standards and Guidelines

Specific management references and guidelines as well as governance monitoring indicators have been identified for each management action. These will be used during the environmental management and monitoring of the mining sector.

8.4: Roles and Responsibilities

It is the responsibility of the Ministry of Mining and the associated agencies to implement the EMMP and to make sure that all the actions are carried out in partnership with a wide range of other stakeholders as outlined in the EMMP. The successful implementation of the EMMP is however dependent on distribution of roles and responsibilities for each of the management actions as clearly indicated in the EMMP.

8.5: EMMP Schedule

The schedule serves to give the list of environmental action to be undertaken. The EMMP schedule is given in **Table 8-1**.



Table 8-1: Environmental Management and Monitoring Plan for the Mining Sector in Kenya

REF No.	GOVERNANCE CHALLENGE	MANAGEMENT & MONITORING ACTION		REFERENCE DOCUMENTS	GOVERNANCE MONITORING INDICATOR
1. M	MANAGEMENT OF MINERA	L RESOURCES			
1.1	Valuation of land with mineral resources	Develop guidelines for valuation of minerals	MoM in collaboration with National Lands Commission	,,	Land valuation guidelines
1.2	Classification of minerals into low and high categories	Re-classify minerals in the First Schedule of the Mining Act 2016 into those to be administered by the national and county governments and gazette the classifications and develop regulations	MoM	 Mining and Minerals Policy, 2016 Mining Act 2016 	Categorization Schedule 1 of the Mining Act 2016
1.3	Lack of participation and governance framework for county governments in the mining sector	 a) Specify the functions of county governments in managing minerals under their administration structure b) Develop regulations to create mining institutional structures at county level 	MoM	 Mining and Minerals Policy, 2016 Mining Act 2016 County Public Participation Guidelines, 2016 	 Guidelines on the functions of county governments in the mining sector Regulations and county level mining sector institutional structures
1.4	Lack of coordination among implementing agencies of the mining sector governance frameworks	County Environmental Committees (CECs) to incorporate a cross-sectoral integration sub-committee including mining sector	MoM in collaboration with NEMA	EMCA, CAP, 387	A cross-sectoral mining sub-committee integrated in the CECs
1.5	Lack of political good will in implementation of mining sector governance frameworks	Establish county leadership forum to develop a common approach for the mining governance	MoM	County Public Participation Guidelines, 2016	Number of political fora in counties



2. R	ESOURCE UTILIZATION I	N MINING ARFAS			
2.1	Unsustainable mining activities due to over-consumption of resources such as water and energy	Develop guidelines for water harvesting and conservation in mining areas	MoM in collaboration with WRMA	 National Water Policy (2012 Draft) National Land Policy (2009) Sessional Paper No. 1 Of 1999 - National Policy on Water Resources Management and Development National Policy for the Sustainable Development of Arid and Semi-Arid Lands of Kenya (2012) Sessional Paper of 2014 on National Climate Change Framework Policy Water Act, No. 43 of 2016 	 Annual water consumption by mining companies Per capital water estimate for host communities Annual number of stakeholder water shortage complaints due to water use by mining companies
		Develop guidelines for energy conservation in mining areas	MoM in collaboration with Ministry of Energy and Petroleum	 Draft National Energy and Petroleum Policy (2016) Energy Act Cap 314 Energy (Energy Management) Regulations, 2012 Draft Kenya Green Economy Strategy and Implementation Plan (GESIP), 2015 	Annual energy consumption by mining companies
3. E	NVIRONMENTAL POLLUT	ION AND DEGRADATION			
3.1	Environmental pollution including contamination of streams, rivers, lakes, wetlands and groundwater resources	Ammendment of:- a) s176 of the Mining Act No. 2 of 2016 on environmental laws, b) s13 of (License & Permit) Regulations, 2016 (LN No. 87) on the requirements of the Environmental Management and Coordination Act and any regulations or guidelines made	МоМ	 Draft National Policy on Wetlands Conservation and Management (2013)) Environmental Management and Coordination Act (EMCA) Cap 387 Environmental (Wetlands, river banks, lake shores and SESA shore management) 	Annual number of affected areas



		thereunder before any mineral right, and c) s8 of the Mining (Community Development Agreement) Regulations, 2017 (LN No. 148) under:- 8. (1) (h) protection of the environment and natural resources; (i) support for cultural heritage and sports; and (j) protection of ecological systems - to introduce requirements for:- i. Provision of cosystem and Species		Regulations, 2009 – Legal Notice 19	
		Conservation Strategy (ESCS) in the EIA mitigations			
3.2	Environmental pollution and degradation of mining areas	<u> </u>	MoM in collaboration with NEMA	Report of the Taskforce on Management of Quarrying Activities in Kenya, March 2010	Annual number of rehabilitated mines
3.3	Deterioration of water quality	Ammendment of s177 of the Mining Act No. 2 of 2016 on water rights to introduce a requrement for annual water quality monitoring reporting in mining areas in partnership with the local WRUAs	MoM in collaboration with WRMA	 National Water Policy (2012 Draft) Water Act, No. 43 of 2016 Environmental (Water quality Regulations, 2006 (Legal Notice No. 121) 	Annual state of water quality in mining environments
3.4	Lack of mine inspection mechanisms	Strengthen mining inspection capacity of government lead agencies	MoM in collaboration with	EMCA, CAP 387OSHA (2007)Public Health Act Cap 242	Annual number of mines inspected



			NEMA, DOSHS & Public Health		
			Public nealui		
3.5	Illegal artisanal mining and non-decommissioning of artisanal mines	Develop additional regulations and guidelines for the governance of artisanal mining	МоМ	 Mining and Minerals Policy, 2016 Mining Act 2016 EMCA, Cap 387 	Regulations on artisanal mining
3.6	Inadequate financial capacity for the rehabilitation of degraded mining areas	Fast-track the gazettment of the Deposit Bond Regulations	MENR/NEMA	EMCA, Cap 387	Annual number of rehabilitated sites
4. M	IINING DISASTERS				
4.1	Mining disasters such as explosions, fires, shaft collapse, and cave-ins, suffocation, mine flooding and so on		No. with DOSHS and NEMA ons, on	 National Policy for Disaster Management, 2009 County Governments Disaster Management Bill, 2014 	 Annual number of rehabilitated mines Annual number of serious mining disasters
5. B	IODIVERSITY AND ECOS	YSTEMS			
5.1	Loss and degradation of critical ecosystems and loss of species by mining activities	_	mit) on the and any ade eral enity ent)	 Draft National Policy on Wetlands Conservation and Management (2013)) National Wildlife Conservation and Management Policy, 2012 Draft National Forest Policy 2015 Environmental Management and Coordination Act (EMCA) Cap 387 Forest Act No. 7, of 2005 	 Annual number of lost critical ecosystems and species Annual state of environment for critical ecosystems



		under:- 8. (1) (h) protection of the environment and natural resources; (i) support for cultural heritage and sports; and (j) protection of ecological systems - to introduce requirements for:- i. Provision of ecosystem and Species Conservation Strategy (ESCS) in the EIA mitigations		 Wildlife (Conservation and Management) Act Cap 376 of 1976, 2009 National Biodiversity Strategy and Action Plan (NBSAP) 2000 National Master Plan for the Conservation and Sustainable Management of Water Catchment Areas in Kenya 2012 National Environment Policy, 2013 	
5.2	Introduction of alien invasive species in mining areas	Develop "Guidelines for Prevention of Introduction of Alien Invasive Species in Mining Areas"	MoM in partnership with relevant agencies such as CABi, KWS and NEMA	National Biodiversity Strategy and Action Plan (NBSAP) 2000	Annual number of mining sites affected by alien invasive species
5.3	Deforestation by mining sector	Develop "Environmental Rehabilitation and Restoration Regulations for Decommissioned Quarries and Mines" - in collaboration with NEMA in accordance with S180 of the Mining Act No.2 of 2016 on Requirement of site restoration and mineclosure plans	MoM in partnership with KFS	 Draft National Forest Policy 2015 Environmental Management and Coordination Act (EMCA) Cap 387 Forest Act No. 7, of 2005 National Biodiversity Strategy and Action Plan (NBSAP) 2000 National Master Plan for the Conservation and Sustainable Management of Water Catchment Areas in Kenya 2012 National Environment Policy, 2013 	Annual number of forests affected by mining activities



5.4	Wetland loss and degradation	Ammendment of:- a) s176 of the Mining Act No. 2 of 2016 on environmental laws, b) s13 of (License & Permit) Regulations, 2016 (LN No. 87) on the requirements of the Environmental Management and Coordination Act and any regulations or guidelines made thereunder before any mineral right, and c) s8 of the Mining (Community Development Agreement) Regulations, 2017 (LN No. 148) under:- 8. (1) (h) protection of the environment and natural resources; (i) support for cultural heritage and sports; and (j) protection of ecological systems - to introduce requirements for:-Provision of ecosystem and Species Conservation Strategy (ESCS) in the EIA mitigations	MoM	 Draft National Policy on Wetlands Conservation and Management (2013)) Environmental Management and Coordination Act (EMCA) Cap 387 Environmental (Wetlands, river banks, lake shores and SESA shore management) Regulations, 2009 – Legal Notice 19 National Master Plan for the Conservation and Sustainable Management of Water Catchment Areas in Kenya Ramsar Convention National Environment Policy, 2013 	Annual number of wetlands affected by mining activities
6. C	LIMATE CHANGE				
6.1	Climate change disasters e.g. floods, drought, landslides and disease epidemics	Ammendment of:- a) s176 of the Mining Act No. 2 of 2016 on environmental laws, b) s13 of (License & Permit) Regulations, 2016 (LN No. 87) on the requirements of the Environmental Management and Coordination Act and any regulations or guidelines made thereunder before any mineral right, and	MoM	 Sessional Paper of 2014 on National Climate Change Framework Policy Climate Change Act No. 11 of 2016 	Annual number of climate change driven disasters in the mining sector



		c) s8 of the Mining (Community Development Agreement) Regulations, 2017 (LN No. 148) under:- 8. (1) (h) protection of the environment and natural resources; (i) support for cultural heritage and sports; and (j) protection of ecological systems - to introduce Appropriate climate change mitigations in the EIA mitigation strategies			
7. S	OCIAL ENVIRONMENT	<u> </u>			
7.1	Risk of mining related conflicts	Ammendment of:- a) s176 of the Mining Act No. 2 of 2016 on environmental laws, b) s13 of (License & Permit) Regulations, 2016 (LN No. 87) on the requirements of the Environmental Management and Coordination Act and any regulations or guidelines made thereunder before any mineral right, and c) s8 of the Mining (Community Development Agreement) Regulations, 2017 (LN No. 148) under:- 8. (1) (h) protection of the environment and natural resources; (i) support for cultural heritage and sports; and (j) protection of ecological systems - to introduce requirements for:- i. Provision of Grievance Redress Mechanism (GRM)	МоМ	Draft National Policy on Peace Building and Conflict Management (2006)	Annual number of mining related conflicts



		in the EIA mitigation strategies			
7.2	Public safety and health problems	Ammendment of:- a) Mining (Community Development Agreement) Regulations, 2017 (LN No. 148) under s2, and b) Mining (License & Permit) Regulations, 2016 (LN No. 87) under s178 on occupational health and safety - to introduce requirements for Mining Disaster Surveillance and Emergency Response Plan	MoM in collaboration with DOSHS	 National Policy on Occupational Safety and Health, 2012 National Environmental Sanitation and Hygiene Policy 2016-2030 Occupational Safety and Health Act 2007 Public Health Act, Cap 242 (GoK, 1986) 	Annual number of OSH cases in mining areas
7.3	Risk of radiation exposure	Develop Radiation Safety Regulations and guidelines for the mining sector	MoM in partnership with the Radiation Protection Board (RPB)	 National Policy on Occupational Safety and Health, 2012 Radiation protection Act, Cap 243, (Revision 2012) Radiation Protection (Standards) Regulations, 1986 (Legal Notice 54/1986) Radiation Protection (Safety) Regulations, 2010 	Annual number of radiation exposure cases in mining areas
7.4	Increased spread of HIV/AIDS	Develop guidelines for prevention of HIV/AIDS transmission in mining areas	MoM in partnership with the MoH and the National Aids Control Council	i	Annual number of HIV/AIDS cases in mining areas



7.5	Inadequate CSR interventions – e.g. transport, water, sanitation, and housing	Ammendment of:- a) Mining (Community Development Agreement) Regulations, 2017 (LN No. 148) under s2 b) Mining (Employment and Training) Regulations, 2017 (LN No. 82) - To make a requirement for a CSR policy, implementation plan and annual reports	МоМ		Annual number of mining related CSR interventions
7.8	Ineffective Liaison Committees	Develop guidelines on the formation and operationalization of the Liaison Committees and incorporate host communities in the Liaison Committees	МоМ	Mining and Minerals Policy, 2016Mining Act 2016	Guidelines on formation and operations of Liaison Committees
7.9	Control of the mining sector by local and international cartels	Empower locals to effectively participate in the mining sector	МоМ	 Mining and Minerals Policy, 2016 Mining Act 2016 Policy Statement on Public Private Partnerships, 2011 Public Private Partnership Act, 2016 	Number of local investors in the mining sector
7.10	Unfair compensation and resettlement of displaced communities	Establish and gazette compensation and resettlement regulations at the local level as provided under Article 153(8) of the Mining Act 2016	MoM in collaboration with Ministry of Lands and Physical Planning	Eviction and Resettlement Guidelines, 2009	Gazetted compensation and resettlement regulations
7.11	Lack of capacities among implementing agencies of the mining sector governance frameworks	Strengthen the capacities of implementing agencies	MoM in collaboration with the mining governance frameworks implementing agencies	• OSHA (2007)	Enhanced capacity of implementing agencies



8. H	3. HUMAN RIGHTS				
8.1	Inadequate consideration of consumer rights - goods and services of reasonable quality	Review the Mining (Reporting of Mineral Related Activities) Regulations, 2017 to make a requirement compliance with relevant Kenya Bureau of Standards quality thresholds	MoM in partnership with KeBS	Standards Act, Cap 496, 1974	Annual number of rights violation complaints
8.2	Inadequate consideration of the right to administrative action that is expeditious, efficient, lawful, reasonable and procedurally fair	Review the Mining (Community Development Agreement) Regulations, 2017 (LN No. 148) under s2 to adequately consider the Bill of Rights in the Constitution of Kenya	МоМ	Constitution of Kenya, 2010	Annual number of rights violation complaints
8.3	Inadequate consideration of the right to administrative action	Review the Mining (Community Development Agreement) Regulations, 2017 (LN No. 148) under s2 to adequately consider the Bill of Rights in the Constitution of Kenya	MoM	Constitution of Kenya, 2010	Annual number of rights violation complaints
8.4	Inadequate consideration of the right to information and access	Review the Mining (Community Development Agreement) Regulations, 2017 (LN No. 148) under s2 to adequately consider the Bill of Rights in the Constitution of Kenya	МоМ	Constitution of Kenya, 2010	Annual number of rights violation complaints
8.5	Inadequate consideration of the right to security and peace	Review the Mining (Community Development Agreement) Regulations, 2017 (LN No. 148) under s2 to adequately consider the African Charter of Human and People's Rights	МоМ	African Charter of Human and People's Rights	Annual number of rights violation complaints
8.6	Inadequate consideration of the right of equal access to public service	Review the Mining (Community Development Agreement) Regulations, 2017 (LN No. 148) under s2 to adequately consider the African Charter of Human and People's Rights	МоМ	African Charter of Human and People's Rights	Annual number of rights violation complaints
8.7	Inadequate consideration of the right to proper physical and mental health	Review the Mining (Community Development Agreement) Regulations, 2017 (LN No. 148) under s2 to adequately consider the African Charter of Human and People's Rights	МоМ	African Charter of Human and People's Rights	Annual number of rights violation complaints



9. CONCLUSION AND RECOMMENDATIONS

9.1: Conclusion

9.1.1: PPP Analysis

The governance framework for the mining sector is well configured in terms of environmental sustainability. The integration of obligations in 78 environmental frameworks in the 18 governance frameworks for the mining sector indicated that majority of the obligations in national policies were either fully, well or moderately integrated with only 4 out of 20 policies (4%) as not fully integrated. The not fully-integrated policies include; the National Water Policy (2012 Draft), National Wildlife Conservation and Management Policy, 2012, National Policy for Disaster Management, 2009 and the National HIV and Aids Policy, 2009. The pattern was similar for the legal frameworks with only 4 out of 23 legal frameworks being considered as not fully integrated in the governance frameworks, namely; the HIV and AIDS Prevention and Control Act No. 14 of 2006, Radiation Protection Act Cap 243 (Revision 2012), the National Cohesion and Integration Act, 2011 (Amendment 2012) and the County Governments Disaster Management Bill, 2014. The key national strategy which was found to be poorly integrated is the National Climate Change Response Strategy (NCCRS, 2010) which is compounded by lack of integration of the United Nations Framework Convention on Climate Change (UNFCCC) and the United Nations Convention to Combat Desertification (UNCCD). Only 11 environmental sustainability instruments (15.3%) have not fully integrated, namely; 6 environmental policies, 6 legal frameworks, 2 environmental regulations, 1 national strategy and 2 MEAs.

The PPP analysis showed that the amended governance framework in the mining sector through the Mining and Minerals Policy 2016, Mining Act 2016 and the newly introduced mining regulations if implemented properly can have the following positive impacts:-

- a) Improved implementation and administration of mining project EIAs
- b) Preservation of heritage sites in mining areas
- c) Compensation and resettlement of mining host communities
- d) Women empowerment
- e) Maintaining safe working environment in mining areas
- f) Noise and vibration control
- g) Sustainable development in protected areas in accordance with approved management plans
- h) Free movement of wildlife in mining areas
- i) Involvement of community institutions (e.g. WRUAs and CFAs) in conservation within the mining areas

The PPP analysis also revealed that the following potential negative impacts which are likely to emerge from the current configuration of the governance framework in the mining sector through the Mining and Minerals Policy 2016, Mining Act 2016 and the newly introduced mining regulations:-

- a) Overconsumption of resources such as water and energy.
- b) Mining disasters such as explosions, fires, shaft collapse and cave-ins, suffocation, mine flooding and so on.
- c) Climate change disasters e.g. floods, drought, landslides and disease epidemics
- d) Deforestation in mining areas.
- e) Loss and degradation of critical ecosystems and loss of species by mining activities.
- f) Wetland loss and degradation.
- g) Introduction of alien invasive species in mining areas.
- h) Contamination of streams, rivers, lakes, wetlands and groundwater resources.
- i) Deterioration of water quality.
- j) Risk of mining related conflicts.
- k) Public safety and health problems.
- I) Risk of radiation exposure.
- m) Increased spread of HIV/AIDS.
- n) Inadequate CSR interventions for the host communities.



Additionally, the PPP analysis indicated that integration of obligations in 12 human right frameworks in Kenya as well as the obligations in the Constitution of Kenya especially Chapter 4 on the Bill of Rights were either fully, well or moderately integrated in the mining sector governance framework. However, some areas of the Constitution are not fully integrated in the current governance framework for the sector, namely, the consumer rights and rights to the expected administrative action. Abuse of consumer rights in the mining sector might include; lack of proper safety devices as well as the inability to produce good quality and genuine mineral products. The governance framework for the mining sector as recently amended has also not adequately integrated the right to administrative action as enshrined in Article 47[1] of the Constitution of Kenya which recognises the entitlement of every citizen to administrative action that is expeditious, efficient, lawful, reasonable and procedurally fair; and, by implication, points to the obligations of a public officer while taking administrative action. This means that the mining sector might not completely ensure administrative justice in mining activities including being able to deal with vices like lack of accountability and transparency, corruption and inefficiency.

9.1.2: Stakeholder Views

The synthesis of findings from the stakeholder consultations showed that the emerging issues in the mining sector were both similar and dissimilar to the findings of the PPP analysis. The overall list of mining sector governance gap issues raised by the stakeholders were;- a) widespread control of the mining sector by local and international cartels, b) inadequate capacity for mining governance agencies, c) lack of proper coordination for agencies involved in mining sector governance, d) lack of a national framework for compensation and resettlement of displaced communities, d) inadequate participation of county governments in the mining sector governance, e) ineffective mining Liaison Committees, h) non-decommissioning of mines, and i) lack of proper mine inspection mechanisms.

The overlapping mining governance gaps identified in the PPP analysis and stakeholder consultations included; a) a) risk of mining related conflicts, b) risk of public safety and health problems, c) risk of radiation exposure, d) likely spread of HIV/AIDS, and, e) inadequate CSR interventions.

9.1.3: Mining Project EIAs

Evaluation of the mining project EIAs showed that only a very small number were undertaken by a well constituted team of experts including the involvement of mining engineers and geologists who are more conversant with the sector. The overall quality of EIA reports was found to be quite poor in terms of comprehensive consideration of all the phases of mining projects, adequacy of environmental regulatory framework, prediction of potential biological impacts, human right issues and quality of stakeholder consultation meetings. Their quality was also very poor in terms of the overall quality of stakeholder engagement and consultations, mining related climate change considerations and cost benefit analysis.

Assessment of the institutional Capacity for handling the mining project EIAs reflected the following weaknesses and challenges:-

- a) Lack of involvement of a geologist or mining expert in the review of EIA reports, and
- b) Lack of interest by the general public to get involved in the review of EIA as a constitutional right.

Additionally, evaluation of the post EIA stage for mining activities reflected the following weaknesses and challenges:-

a) Lack of a pro-active capacity for post EIA monitoring including EMP compliance monitoring except through reactive action after public complaints,



b) Capacity for EIA compliance monitoring through regular environmental audits as required by law

9.2: Recommendations

9.2.1: Recommendations from the PPP analysis

a) Mining sector governance framework

The following recommendations are made in order to strengthen the mining sector governance framework and in turn effectively deal with potential negative environmental and human right impacts:-

- i. Review of mining regulations
- ii. Developing additional mining regulations
- iii. Developing mining guidelines

9.2.1.1: Review of Mining Act and Regulations

Review of the Mining Act No. 2 of 2016 and related regulations to address sector governance weaknesses with regard to potential risk of water pollution, wildlife conservation impacts, mining related conflicts and weak integration of climate change mitigation and adaptation should be undertaken as shown in **Box 9.1.**

	Box 9.1: Recommendations for review of Mining Act and Regulations			
Mi		sector	Recommendation	
go	verance weal	kness		
1)	Wildlife conse	ervation	Ammendment of:-	
	impacts		a) s176 of the Mining Act No. 2 of 2016 on environmental laws,	
2)	Mineral	related	b) s13 of (License & Permit) Regulations, 2016 (LN No. 87) on the	
2,	conflict	_	requirements of the Environmental Management and Coordination Act and	
3)	Integration	of	any regulations or guidelines made thereunder before any mineral right,	
	climate	change	and	
	mitigation	and	c) s8 of the Mining (Community Development Agreement) Regulations, 2017 (LN No. 148) under:- 8. (1) (h) protection of the environment and natural	
	adaptation		resources; (i) support for cultural heritage and sports; and (j) protection of	
			ecological systems	
			ecological systems	
			- to introduce requirements for:-	
			i. Provision of cosystem and Species Conservation Strategy (ESCS) in	
			the EIA mitigations	
			ii. Provision of Grievance Redress Mechanism (GRM) in the EIA	
			mitigation strategies	
			iii. Appropriate climate change mitigations in the EIA mitigation	
4)	\\/		strategies	
4)	Water pollution	on	Ammendment of s177 of the Mining Act No. 2 of 2016 on water rights to introduce	
			a requrement for annual water quality monitoring reporting in mining areas in partnership with the local WRUAs	
5)	Mining	disaster	Ammendment of:-	
رد	surveillance	and	a) Mining (Community Development Agreement) Regulations, 2017 (LN No. 148)	
	emergency re		under s2, and	
	cincigency ic	.sporisc	b) Mining (License & Permit) Regulations, 2016 (LN No. 87) under s178 on	
			occupational health and safety to introduce requirements for Mining Disaster	
			Surveillance and Emergency Response Plan	

9.2.1.2: Developing Additional Mining Regulations

The following additional mining regulations should be developed in order to strengthen the governance framework by integrating the missing environment and human right obligations (**Box 9.2**).



Box 9.2: Recom	mendations for formulation of additional mining regulations
Mining sector goverance weakness	Recommended Governance Intervention
Environmental pollution and degradation in mining areas	Environmental Rehabilitation and Restoration Regulations for Decommissioned Quarries and Mines - in collaboration with NEMA in accordance with S180 of the Mining Act No.2 of 2016 on Requirement of site restoration and mine-closure plans
Risk of radiation exposure	Mining Radiation Safety Regulations and Guidelines – in collaboration with the radiation protection Board (RPB)
Public disclosure of royalties paid by mining companies	Mining (Proactive Public Disclosure and Access to Information) Regulations

9.2.1.3: Developing Additional Mining Guidelines

The following additional mining guidelines should be developed in order to strengthen the governance framework by integrating the missing environment and human right obligations (**Box 9.3**).

Box 9.3: Recommendations for formulation of additional mining guidelines				
Mining sector goverance weakness	Recommended Governance Intervention			
Unsustainable mining and over-consumption of resources	Guidelines for Rainwater Harvesting and Conservation in Mining Areas			
Introduction of alien invasive species in mining areas				

9.2.2: Stakeholder recommendations

Most of the stakeholder recommendations were in agreement with those from the PPP analysis. However, the following unique recommendations were advanced by the stakeholders on various mining issues in the country.

a) Management of mineral resources

- Develop guidelines for valuation of land properties where minerals are discovered.
- Re-classify mineral in schedule of the Mining Act 2016 into those to be administered by the national and county governments and gazette the classifications.
- The implementation of the mining act should be done in partnership with County governments.
- Specify the functions of county governments in managing minerals under their administration.
- The national government should base the main administrative institutions for mining at the County level even if mining is a national government function.
- Develop regulations to create mining institutional structures at county level.
- Support the County Environmental Committees (CECs) to incorporate a cross-sectoral integration sub-committee including mining sector.
- Establish county leadership forum to develop a common approach for governance in mining sector.
- Community liaison Committees for mining should be enhanced and supported with budgetary allocations from the National Treasury.
- Establish an inter-agency coordination mechanism at national level to deal with environmental, social, economic and human rights issues in the mining sector.



b) Environmental pollution and degradation

- Strengthen the capacity of government lead agencies to undertake more effective inspections of mining activities.
- Develop additional regulations and guidelines for the governance of artisanal mining.

c) Social Environment

- Develop Occupational Safety and Health Regulations and guidelines for the mining sector.
- Develop guidelines on the formation and operationalization of the Liaison Committees and incorporate host communities in those committees.
- Empower local communities to effectively participate in the mining sector.
- Establish and gazette compensation and resettlement regulations at the local level as provided under Article 153(8) of the Mining Act 2016.
- Strengthen the capacities of mining governance implementing agencies.

d) Human Rights

- Review the Mining (Community Development Agreement) Regulations, 2017 to adequately consider the Bill of Rights in the Constitution of Kenya.
- Review the Mining (Community Development Agreement) Regulations, 2017 to adequately consider the African Charter of Human and People's Rights.

9.2.3: Recommendations on institutional capacity

Given the important oversight role played by these instituiions in the mining sector especially in regards to protection of the environment and human rights, its important to enhance their goverance capacity and make them more effective in their mandates. This needs to be done by; i) allocating adequate finacial resources and essential facilities like vehicles and ICT, ii) training and exposure of DOSHS technical staff on OSH issues associated with the mining sector, iii) employing adequate skilled staff and create suitable incentives for retainace purposes, and, iv) strengthening NEMA's emergency response unit.

9.2.4: Recommendations on inter-agency coordination

It is important to ensure that the Mining Sector, through regulations, guidelines or other policy and administrative actions, continues to mainstream critical human rights and environmental obligations in order to ensure that these obligations remain apparent to all actors in the mining sector. Whereas legal provisions are in place that set extensive human rights and environment prescriptions, their implementation for the mining sector will depend on the presence of a properly designed and resourced Inter-agency coordination framework. This coordination framework is critical to enhance collaborative action amongst public agencies, and to provide support that maybe required by mining industry actors in achieving compliance with human rights and environmental obligations.

For purposes of the mining sector therefore, it is recommended that a Human Rights Mainstreaming and Inter-agency Coordination Strategy should be developed. This strategy will map out all the key concerns arising from this SESA report, and clearly demarcate the responsible institutions for implementing or having oversight over implementation; setting critical milestones for SESA implementation; and putting in place systems to monitor progress in ensuring the mining sector is compliant with human rights and environmental obligations.

9.2.5: Recommendation for Resettlement Policy Framework (RPF)

The granting of a mineral right, such as a mining permit, may in certain instances result in the displacement of people as a result of a proposed mineral operation. This displacement will often happen because the mineral operation is incompatible with the continued settlement of the people in that location. This displacement results in involuntary resettlement of the persons affected by the mineral operations, and is disruptive to the economic wellbeing, social and cultural values of the displaced persons.



For this reason, implementation of mineral operations that result in displacement and involuntary resettlement of people should be subjected to a National Resettlement Policy for the Mining Sector. Section 153(8) of the 2016 Mining Act anticipates the need for implementation of a national safeguards system to protect people that are involuntarily resettled by mineral operations. The Mining Act requires the Cabinet Secretary, in consultation with th National Land Commission, to take measures to ensure that communities that prefer to be compensated by way of resettlement as a result of being displaced by mineral operations are settled on suitable alternative land, with due regard to their economic wellbeing, social and cultural values. It is important that in taking steps to implement this provision, and developing an appropriate resettlement policy for the mining sector, the Cabinet Secretary should ensure that the methodology of compensation includes clear valuation procedures that take into account the value of the land, as applied by the NLC, as well as full or total replacement costs for interference with livelihoods, social and cultural circumstances.

In this sense, implementation of section 153(8) through development of a Resettlement Policy for the mining sector will include proper valuation, at market rates or other adjusted formula, of the land being acquired, and takes into account full replacement costs in identifying alternative land and additional costs of replacing the disruption caused by the displacement and involuntary resettlement caused by the mineral operations.

The MoM should formulate a clear RFP to deal with compensation and resettlement of those displaced by mining operations should be guided by the following frameworks;

- Chapter 5 of the Constitution of Kenya, 2010
- National Land Policy, 2009
- Land Act, 2012
- Community Land Act, 2016 (GOK, 2016a). These policy
- Environmental Management and Coordination Act Cap 387
- International safeguard standards such including the WB and AfDB.

9.2.6: Recommendations on implementation of mining EIAs

The following are recommended with regard to the implementation of mining project EIAs (Box 9.4).

	Box 9.4: Recommendations for mining EIAs		
EIA component	Recommendation		
Approval of ToRs for mining project	''		
EIAs	 a) The inclusion of a mining engineer or geologist in the EIA team b) Comprehensive consideration of all the phases of mining projects, c) Adequacy of the environmental regulatory framework for the EIAs d) Adequate consideration of potential biological impacts e) Adequate consideration of human right issues, Adequate consideration for mining related climate change 		
	 f) Convincing stakeholder engagement plans especially with regard to the number and locations for consultation meetings, g) Adequate strategies for cost benefit analysis 		



REFERENCES

African Development Bank (2007): *African development report 2007: natural resources for sustainable development in Africa*. Oxford, Oxford University Press. http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/26708407-EN-ADR-SUMMARY-2007.PDF.

African Union (1968): African Convention on the Conservation of Nature and Natural Resources.

Appiah, M., & Zhang, T. (2013): *Escaping the resource curse in sub-Saharan Africa*. The Hague, The Hague Institute for Global Justice.

CBD Secretariat (1992): Convention on Biological Diversity, Montreal.

Darby, S. (2008): *Implementing the extractive industries transparency initiative: applying early lessons from the field.* Washington, DC, World Bank. http://site.ebrary.com/id/10231590.

Demissie, M. Z., & Naghshpour, S. (2014): *The natural resource curse in Sub-Saharan Africa: transparency and international initiatives*.

Diakonia (2014): Rapid assessment of the extractive industry sector in Kitui County: the case of coal exploration and mining in the Mui Basin: Final report, December 2014.

Directorate of Occupational Health and Safety (DOSHS). Annual and strategic reports. Available online at http://www.doshs.go.ke.

East Africa Community (1999): Protocol on Environment and Natural Resources Management.

East Africa Community (2010): The East African Community Trans-boundary Ecosystems Management Bill 2010.

East Africa Community (2011): EAC Climate Change Policy (EACCCP).

Environmental Law Alliance Worldwide (2010). *Guidebook for evaluating mining project EIAs*. Eugene, OR, Environmental Law Alliance Worldwide. http://www.elaw.org/files/mining-eia-guidebook/Full-Guidebook.pdf.

GoK (1985): The Wildlife (Conservation and Management) Act: Cap 376 revised 2009.

GoK (1986): Public Health Act: Cap. 242.

GoK (1997): The Sessional Paper No. 4 of 1997 AIDS in Kenya.

GoK (1998): The Physical Planning Act: Cap 286 0f 1998.

GoK (1999a): Environmental Management and Coordination Act (EMCA) No. 8 of 1999, Government Press, Nairobi.

GoK (1999b): Sessional Paper No. 6 of 1999 on Environment and Development.

GoK (2000a): National Gender and Development Policy, Ministry of Gender Sports Culture and Social Services.

GoK (2000b): The Kenya National Biodiversity Strategy and Action Plan, Ministry of Environment and Natural Resources.



GoK (2002): The Water Act, 2002: Cap 372 of 2002.

GoK (2005a): The Forests Act, 2005. Nairobi: Government Press.

GoK (2005b): Forest Policy, Sessional Paper No. 9 of 2005.

GoK (2005c): Crop Production and Livestock Act Cap 321.

GoK (2005d): Promotion of extractive and mineral processing industries in the East African Community - Kenya status.

GoK (2006a): Draft National Policy on Peace Building and Conflict Management.

GoK (2006b): The Energy Act No. 12 of 2006.

GoK (2007a): National Environmental Sanitation and Hygiene Policy, Ministry of Health.

GoK (2007b): National Tourism Policy, Ministry of Tourism and Wildlife.

GoK (2008b): Vision 2030: A Globally Competitive and Prosperous Kenya, Ministry of State for Planning, National Development and Vision 2030.

GoK (2009a): EMCA (Wetlands, River Banks, Lake Shores and SESA Shore Management Regulations), 2009. Legal Notice No. 19.

GoK (2009b): National Environment Action Plan Framework 2009-2013, National Environment Management Authority.

GoK (2009c): Sessional Paper No. 3 of 2009 on National Land Policy.

GoK (2009d): Draft National Policy for Disaster Management, Ministry of State for Special Programmes.

GoK (2010a): National Climate Change Response Strategy, Ministry of Environment & Mineral Resources.

GoK (2010b): The Constitution of Kenya, 2010.

GoK (2010c). The national minerals and mines policy. Nairobi: Government Printers.

GoK (2011): Draft Wildlife Policy, Ministry of forestry and Wildlife.

GoK (2012a): Draft of the National Water Policy.

GoK (2012b): Master Plan for the Conservation and Sustainable Management of Water Catchment Areas in Kenya, Ministry of Environment and Mineral Resources.

GoK (2012c): National Environment Policy, Draft 4, Ministry of Environment, Water and Natural Resources.

GoK (2012d): Sessional Paper No. 8 of 2012 on National Policy for the Sustainable Development of Northern Kenya and other Arid Lands.

GoK (2012e): The Tourism Act, No. 28 of 2012. Government Printer, Nairobi.



GoK (2013a): Draft National Wetlands Conservation and Management Policy, Ministry of Environment Water and Natural Resources.

GoK (2013b): Wildlife Conservation and Management Bill, 2013. Government Printer, Nairobi

GoK (2015a): Investment handbook -2015; Ministry of Mining. Government Printer, Nairobi

GoK (2015b): ACT NO. 8 of 1999-Environmental Management and Co-ordination Act. Nairobi: Government Printer.

GoK (2016a): Mining Act. Government Printer, Nairobi.

GoK (2016b): Mining and Minerals Policy. Government Printer, Nairobi

Habitat Planners (2013): ESIA for the Niobium processing plant project in Kwale County by Cortec Mining Company.

Institute of Economic Affairs (IEA) (2014): A Primer to the emerging extractive sector in Kenya: resource bliss, dilemma or curse.

Institute on Governance (IoG) (2009): In SESArch of common ground: reconciling western-based governance principles and first nations traditions. Institute on Governance, 122 Clarence Street, Ottawa, Ontario, Canada.

International Labour Organization (ILO) (2013): National profile on occupational safety and health-Kenya. Programme on safety and health at work and the environment (SafeWork).

Kenya National Bureau of Statistics (2013): Kenya facts and figures 2013: Nairobi, Kenya, Kenya National Bureau of Statistics.

Kenya National Commission on Human Rights (KNCHR) (2013): Strategic plan 2013–2018.

Kenya National Commission on Human Rights (KNCHR (2016): The state of human rights in the Kenyan Extractive Sector.

Kostick, D.S. (2013): Soda ash: U.S. geological survey mineral commodity summaries 2013, pp 148–149.

Miller, M.M. (2013): Fluorspar: U.S. geological survey mineral commodity summaries, pp 56-57.

Munyiri, S. (2009): Policy position paper on the proposed amendments of the mining and minerals bill 2009. Nairobi: Kenya Chamber of Mines.

Mutemi, M. and Samoei, D. (2012): Status of water and quality in the coal rich Mui basin of Kitui County. ARPN Journal of Earth Sciences, Vol. 1(2): 48-51.

Mutua, E. (2014): Report on the policy, legal and regulatory framework in the extractive industry of Kenya.

Murthy A. and Patra H.S. (2006): Ecological, socio-economic and health impact assessment due to coal mining: a case study of Talabira coal mines in Orissa. Orissa, India.

NEMA (2012): National Guidelines for Strategic Environmental and Social Assessment in Kenya.

Norwegian Church Aid (NCI) (2015): Local communities in Kenya's extractive sector: from paternalism to Partnership.

Olive leaf foundation (OLF) (2012): Policy gaps in mining and mineral sector in Kenya.

Olive Leaf Foundation (2012): Baseline survey of the mining and mineral sector in Kitui County.

Rich, E., & Moberg, J. (2015): *Beyond governments: making collective governance work: lessons from the Extractive Industries Transparency Initiative*.

Sustainable Development Solutions Network (2016). *Mapping mining to the sustainable development goals:* an atlas.

UK Aid (2013): Recommendations for the development of Kenya's extractive industries based on inclusive Multi-stakeholder consultation. Nairobi, Adam Smith International.

United Nations (1971): Ramsar Convention, Gland.

United Nations (1972): World Heritage Convention, Paris.

United Nations (1979): United Nations Convention on Migratory Species, Bonn.

United Nations (1992): United Nations Framework on Combating Climate Change, New York.

United Nations (1994): United Nations Convention to Combat Desertification, Bonn.

United Nations (2005): Investment policy review in Kenya. New York: United Nations.

United Nations Development Programme (2014): Extractive industries for sustainable development in Kenya. Final assessment report.

