

**COUNTY GOVERNMENT OF KITUI**



**DRAFT KITUI COUNTY RIVER BASINS  
SAND UTILIZATION  
&  
CONSERVATION  
POLICY, 2023**



## *CLARIFICATION ON TITLE ADOPTED FOR THE POLICY AND BILL*

This policy provides a framework for sustainable sand utilization that equally accords due attention to the protection and conservation of river basins within Kitui County.

The policy proposals capture the views of more than 2,107 stakeholders who gave their views during public participation forums conducted all the county`s eight (8) sub counties.

In this regard, it has been agreed/decided that the befitting title of the Report, Policy and the Bill be ***'Kitui County River Basins Sand Utilization and Conservation'***.

The new title supersedes the original title that was captioned *'Kitui County Sand Harvesting and Management'* as per the Kenya Gazette No. 5845 dated 5<sup>th</sup> May, 2023 by the Governor when he appointed the Taskforce.

## FOREWORD

The Livelihoods of Kitui people are closely linked to their natural resources, making the quality and integrity of these resources critical to their economic development and their livelihoods. In recent year, the quality and integrity of the River Basins in the county has been severely degraded as a result of unfettered mining of sand resource.

Currently, rivers such as Kivou, Kanginga, Mwanja, Mwitasyano and Tiva Kwa Masesi are highly degraded due to uncontrolled sand harvesting. Unfortunately, despite the large volumes of sand moved from the rivers, local communities have little to show in benefits from the resource exploitation. Instead, they are faced with receding water levels, increased water scarcity and long distances between water points.

A well-organized and regulated sand sector has the capacity to protect and conserve the environment, offer employment opportunities, catalyze sand related industries leading to overall development.

The County Government of Kitui under the leadership of H.E. Dr Julius M. Malombe, EGH, the Governor, cognizant of the negative impacts to the environment posed by unregulated sand harvesting and recalling his commitment to environmental protection and wealth creation underscored in *The Kitui Promise*; constituted and gazetted *Kitui County Sand Harvesting and Management Taskforce, 2023* to prepare a report on sand value chain and draft Policy and a Bill.

Pursuant to The Constitution of Kenya, 2010, as envisaged in Article 42 (the bill of rights), Article 69 on resources utilization and equity, Article 185 on legislative authority of County assemblies' sections (1), (2) and 4 (a)

and the powers of the County government under the Fourth Schedule, a county assembly may receive and approve plans and policies for the management and exploitation of the County's resources. It is in this spirit that, the draft ***Kitui County River Basins Sand Utilization and Conservation Policy and a Bill*** are submitted to the Kitui County Assembly for consideration, adoption and enactment.

The policy establishes a baseline for the county to realize its aspirations of sustainable development, wealth creation and self-reliance.

*As you consider the policy, I invite you to recall the wise words of; Nelson Mandela, iconic son of Africa, Anti-Apartheid Champion and the First Black Democratically Elected President of South Africa,*

*'It is in your hands to create a better world for all who live in it.'*

The value of this policy will only be demonstrated through the actions we take individually and collectively as a county to restore the integrity of our natural resources and raise the quality of life for Kitui people.



Richard John Mwendandu  
County Executive Committee Member

**Energy, Environment, Climate Change, Forestry, Natural and Mineral Resources**

## **ACKNOWLEDGEMENT**

I share the view of the scientist/Philosopher, Sir Isaac Newton; *'if I have seen any farther, it is by standing on the shoulder of giants'*. We are indebted to H.E Dr. Julius Makau Malombe, EGH, the Governor County Government of Kitui for appointing the Taskforce on Sand Harvesting and Management, 2023 and providing the desired strategic leadership to the teams towards the development of this policy.

We acknowledge the invaluable input and support by the County Executive Committee Members in the formulation and approving of this policy. We extend our special appreciation to the Taskforce that guided the formulation of this Policy for their commitment and dedication.

Further, I am grateful to the members of the public who participated in open public consultations and other key stakeholders who provided invaluable comments and suggestions that shaped this Policy. A Special mention goes to the Civil Society Organizations who gave their input through auspices of RECONCILE.

Finally, we sincerely appreciate the Members of County Assembly and all those who submitted their views and comments directly or by mail to shape the policy.



Henry N. Nyamai

**Chief Officer**

**Energy, Natural and Mineral Resources**

## **ABBREVIATIONS AND ACRONYMS**

BBCS	Basin Based Cooperative Societies
C.O.	Chief Officer responsible for Natural and Mineral Resources
Cap	Chapter of law
CECM	County Executive Committee Member responsible for Natural and Mineral Resources
CSR	Corporate Social Responsibility
E.A	Environmental Audit
E.I.A	Environmental Impact Assessment
eKLR	Electronic Kenya Law Report
EMCA	Environmental Management and Coordination Act
GESI	Gender Equity and Social Inclusion
HIV/AIDS	Human Immunodeficiency Virus /Achieved Immune Deficiency Syndrome
MEL	Monitoring, Evaluation and Learning
OHS	Occupational Health and Safety
SBCSGs	Site Based Community (Sand) Groups
SDG	Sustainable Development Goals
SOPs	Standard Operating Procedures
STDS	Sexually Transmitted Diseases
STIs	Sexually Transmitted Infections
UNEP	United Nations Environment Programme

## DEFINITION OF TERMS

Aggregation	Heaping of sand for Commercial Purposes
Caretaker Committee	An interim committee, precursor to River Basin Cooperative Society
Cartels	A group of dealers who unite to control a business
Committee	Refers to Kitui County River Basins Sand Utilization and Conservation Committee
Conservation	Prevention of wasteful use of resources
Degradation	Act of reducing the quality of land
Directorate	Directorate in-charge of Natural and Mineral Resource
Equity	Fair and impartial distribution of resources
Exploitation	Action of making use of and benefitting from a resource
Groups	Site Based Community (Sand) Groups
Livelihoods	A means of securing necessities of life
Protection	Act of preventing damage to the environment
Policy	Kitui Sand Harvesting and Management Policy, 2023
Rehabilitation	Restore environment to the previous state
Revenue	Monies generated in relation Sand Value Chain
River	A large natural water course usually a fresh water stream flowing into another water body of lower elevation especially to the sea, a lake or another river
River Basin	A collection of rivers draining into the same direction within the county
Sand Aggregation Yard	Means an area designated by the Committee for

Stockpiling sand for sale Sand Value Chain Refers to overall activities within the sand industry including and not limited to harvesting, aggregation, transportation, value addition

Sustainable

Utilization of resources to meet current needs taking cognizant of future generation.

Utilization

Sustainable and effective use of resources



# DRAFT KITUI COUNTY RIVER BASINS SAND UTILIZATION AND CONSERVATION POLICY, 2023

## TABLE OF CONTENTS

FOREWORD ..... ii

ACKNOWLEDGEMENT ..... iv

ABBREVIATIONS AND ACRONYMS ..... v

DEFINITION OF TERMS ..... vi

1.0 Introduction ..... 2

1.1 Background information ..... 3

1.2 Policy Context ..... 5

1.3 Justification ..... 6

2.0 Situational Analysis ..... 8

2.1 Legal and Institutional Framework ..... 8

    2.1.1 The Constitution of Kenya, 2010..... 8

    2.1.2 The Mining Act, 2016 ..... 9

    2.1.3 The Environmental Management and Co-ordination Act, 1999..... 10

    2.1.4 The National Sand Harvesting Guidelines, 2007 ..... 10

    2.1.5 Case laws..... 10

    2.1.6 Other laws that have an impact in the mining sector (Sand harvesting)..... 11

2.2 Market Demand ..... 12

2.3 Socio- Economic issues ..... 13

2.4 Environmental Issues ..... 13

2.5 Data, Technology and information gap ..... 14

2.6 Infrastructure ..... 15

3.0 Policy goal, guiding principles objectives and strategies ..... 16

    3.1 Policy Goal..... 16

    3.2 Guiding Principles ..... 16

    3.3 Policy Objectives and Strategies ..... 16

3.3.1 To provide a legal and institutional framework for sustainable management of the sand value chain.....	17
3.3.2. Provide a mechanism for community involvement in environmental protection, conservation and restoration .....	17
3.3.3 Establish mechanisms for sustainable sand harvesting, utilization and management of sand resource .....	18
3.3.4 To provide a framework for equitable sharing of sand value chain benefits between the county government and the communities in the sand River Basins .....	18
3.3.5 Mainstream gender equity and social inclusion in the sand value chain activities .....	19
4.0 Institutional Framework.....	21
4.1 Directorate of Natural and Mineral Resources.....	22
4.2 Functions of the Directorate.....	23
4.2 Kitui County River Basins Sand Utilization and Conservation Committee.....	25
4.3 River Basin - Based Co-operative Societies .....	25
4.3.1 Establishment of the River Basin Based Co-operative Societies (RBBCSs) .....	26
4.3.1 Establishment of River Basin Based Co-operative Societies (RBBCSs).....	29
4.4 Site Based Community (Sand) Groups .....	31
4.4.1 Criteria for Group Formation and membership eligibility .....	31
4.4.2 Responsibilities of the Site-Based Community (Sand) Groups .....	32
4.4.3 Process of Creating Site-Based Community (Sand) Groups.....	32
4.4.4 Eligibility to be elected as an Office Bearer .....	34
5.0 Implementation Plan .....	35
6.0 Policy Review .....	35
7.0 Financing Mechanism .....	35
8.0 Policy Risk analysis .....	36
8.1 Political environment.....	36
8.2 Environmental risks.....	36
8.3 Social risks .....	37
8.4 Economic risks.....	37
9.0 Monitoring, Evaluation and Learning .....	37

*'If we act now, it is still possible to avoid a sand crisis we should start transformation in our institutions, businesses and societies in how we manage and use sand.'*

*Sheila Aggarwal – Khan, Director UNEP*

## 1.0 Introduction

Kitui County lies in the Arid and Semi-Arid zones of the South Eastern Kenya. The topography, of the region contributes to the formation of many rivers and streams endowed with large quantities of sand. For administrative convenience, the County Government of Kitui has grouped the rivers into five river Basins as follows:

- i. **Nziitu River Basin;** made up of rivers; Nziitu, Konyu, Katse and all other rivers and streams draining in the same direction.
- ii. **Enziu River Basin;** is made up of following rivers; Enziu, Mwanja, Mui and all other rivers and streams draining in the same direction
- iii. **Tyaa River Basin;** made up of rivers; Tyaa, Kamuwongo, Nguutani and all other rivers and streams draining in the same direction.
- iv. **Thua River Basin;** made up of rivers; Thua, Ikoo, Ngunga and all other rivers and streams draining in the same direction
- v. **Tiva River Basin;** made up of rivers; Tiva, Nzeeu, Mwitasyano and all other rivers and streams draining in the same direction

Owing to the proximity of the county to big cities, urban centres coupled with good road network connectivity, Kitui County has in the recent past experienced high demand for its naturally occurring sand.

Sand harvesting within the County is unregulated and is majorly controlled by cartels and other un-organized groups. Consequently, this has led to wanton destruction of some rivers through uncontrolled sand harvesting activities resulting to negative effects on the environment and socio-economic development.

## **1.1 Background information**

Sand is defined as unconsolidated (loose) grains of minerals and rock that are less than 2.1mm (0.08 inches) but more than 0.06mm (0.006 inches) in diameter.

Sand is a naturally occurring resource and the most preferred for construction work and other industrial activities. In recent years, sand harvesting and utilization in Kenya and more specifically within Kitui County has divided opinions due to its environmental impacts, differentiated stakeholder interests and the need to share accrued benefits fairly and equitably.

Sand resource plays a critical role in the economic development of the Country including creating jobs, multiplier effects to the economy and growth of government revenues. It is linked to all [17 Sustainable Development Goals \(SDGs\)](#) either directly or indirectly. Despite the strategic importance of sand, its extraction, sourcing, use and management remain largely ungoverned in many regions of the world, leading to numerous environmental and social consequences that have been largely overlooked, (UNEP Report, 2022).

In Kenya, harvesting of sand is widely practiced in most regions. It involves the extraction of sand from riverbeds and beaches mainly for construction purposes including but not limited to concrete making, building roads, bridges and other infrastructural works. However, unregulated harvesting of sand has led to severe environmental degradation such as land erosions, collapsing of riverbanks, and the destruction of natural habitats coupled

with increased reported negative social issues such as insecurity, school drop outs, drug and substance abuse, teen pregnancies among others.

In order to address the menace, the Government of Kenya introduced various legislation to manage sand harvesting activities. For instance, the Environmental Management and Coordination Act, 1999, Environmental (Impact Assessment and Audit) Regulations of 2003 and the National Sand Harvesting Guidelines of 2007 were developed to oversee the sector and ensure sustainable sand harvesting practices.

Kitui County has witnessed rampant and unsustainable sand harvesting activities on its rivers resulting into receding water table and drying up of most rivers. The most affected rivers are Kivou, Tiva, Nzeeu, Mutendea Mwitasyano, Tyaa, Nguutani, Enziu, and Mwanja. This has made irrigated Agriculture difficult resulting to food insecurity, water scarcity, environmental degradation, loss of lives and livelihoods. The situation has been aggravated by recurrent and intense droughts in the recent years.

The County Government of Kitui through Kenya Gazette notice no. 936 of January 2018 issued a ban on transportation and sale of sand outside the geographical boundaries of the County. Despite the ban, unregulated Sand harvesting activities have continued unabated thus creating fertile grounds for proliferation of cartels and un-organized groups.

There is need to control sand harvesting and related activities at the Basins to ensure sustainability through protection, conservation and rehabilitation of rivers. This necessitates formulation of a comprehensive policy framework to provide guidance on environmental conservation and

restoration of depleted river ecosystems, regulate harvesting and utilization of sand as well as ensuring community participation and sharing of accruing benefits.

## **1.2 Policy Context**

According to UNEP report on sand and sustainability (2019), sand and gravel are the most extracted group of materials globally, exceeding fossil fuels and biomass. The report estimates that 40-50 billion tons of sand and gravel are extracted every year worldwide, and this number is increasing as demand for construction materials grows. In view of this, there is need for governments to put in place policies that regulate sustainable utilization of river-based resources including sand.

In Kenya, sand harvesting and utilization legislation are fragmented, outdated and not aligned to the Constitution of Kenya 2010. The County Government of Kitui doesn't have own legislation to govern sustainable sand harvesting either. This makes it difficult to enforce such laws for sustainable sand harvesting and utilization. This is despite the potential sand has to generate enough revenue to undertake conservation and management of the degraded ecosystems. For example, the National Sand Harvesting Guidelines, 2007 are secondary legislation that apply to all sand harvesting activities in Kenya and is aimed at ensuring sustainable utilization of sand resources and proper management of the environment; however, its administrative structures are not aligned to the Constitution of Kenya, 2010.

Article 69 of the Constitution of Kenya, 2010 mandates the State to ensure sustainable exploitation, utilization, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits. Further, the fourth schedule of the Constitution of Kenya, 2010 Part II, and Function 10 mandates County Governments to implement specific National Government policies on natural resources and environmental conservation, including soil and water conservation and forestry.

With the increase in demand for sand resource triggered by ballooning urban and infrastructure development aligned to Kenya Vision 2030 and the national housing policies, there is need for County Governments to put in place a policy framework to ensure environmental conservation through appropriate legislation for sustainable utilization of sand resource and the equitable sharing of accruing benefits.

### **1.3 Justification**

Sand harvesting and extraction in Kitui County is unregulated and majorly controlled by cartels and illegal groups. Lack of institutional framework coupled with weak enforcement mechanisms and absence of clear guidelines for effective conservation, rehabilitation and restoration of river ecosystems has affected smooth operations in the sector. In addition, the County lacks measures for equitable sharing of the accrued benefits from sand value chain.

This policy therefore, endeavors to provide clear guidance on sustainable management of sand value chain; community participation with emphasis



to equitable benefit sharing; and protection, conservation and restoration of the river ecosystems.

*'We are spending our sand 'budget' faster than we can produce it responsibly by improving the governance of global sand resources.'*

*Joyce Msuya – Ag. Executive, Director of UN Environment*

## **2.0 Situational Analysis**

The situational analysis in this policy seeks to identify prevailing gaps, opportunities, and challenges in policy implementation. This will help in developing realistic and effective strategies to address community concerns and lay out strategies for ensuring sand harvesting does not cause unnecessary degradation of the environment.

### **2.1 Legal and Institutional Framework**

Kenya has passed various laws and regulations that affect the conservation, harvesting and sustainable utilization of sand being a naturally occurring resource.

#### **2.1.1 The Constitution of Kenya, 2010**

The Constitution is the supreme law in the Republic of Kenya that binds all persons and all State organs at both levels of government.

Article 42 of the Constitution of Kenya, 2010 (the Bill of Rights) stipulates that every person has the right to a clean and healthy environment, which includes the right to have the environment protected for the benefit of present and future generations through legislative framework and other measures, particularly those contemplated in Article 69.

Article 69 of the Constitution of Kenya, 2010 mandates the State to ensure sustainable conservation, exploitation, utilization, and management of the environment and natural resources, and ensure the equitable sharing of the accruing benefits. In doing so, the State is obligated to ensure that it eliminates processes and activities that are likely to endanger the environment; and utilizes the environment and natural resources for the benefit of the people of Kenya.

Article 174 of the Constitution of Kenya, 2010 gives powers of self-governance to the people and enhances the participation of the people in the exercise of the powers of the State and in making decisions affecting them and recognizes the right of communities to manage their own affairs and to further their development.

### **2.1.2 The Mining Act, 2016**

This ACT of Parliament gives effect to Articles 60, 62 (1)(f), 66 (2), 69 and 71 of the Constitution of Kenya, 2010 in so far as they apply to minerals; provides for prospecting, mining, processing, refining, treatment, transport and any dealings in minerals and for related purposes.

The Mining Act establishes a licensing regime which confers mineral rights to large scale, small scale and artisanal miners. By virtue of Legal Notice No. 62 of 2017 and section 6 (1) of the Mining Act, sand is vested in the government like other natural resources such as fisheries, minerals, geothermal resources and renewable energy sources. In the Mining Act 2016, sand is classified as a construction mineral.

### **2.1.3 The Environmental Management and Co-ordination Act, 1999**

The Environmental Management and Co-ordination Act (EMCA), 1999 is an Act of Parliament that provides for the establishment of an appropriate legal and institutional framework for the management of the environment and for matters connected therewith and incidental. This Act was amended in 2015. Section 2 of the Environmental Management and Coordination Act No. 8 of 1999 (EMCA), sand falls in the rubric of soil' which also includes rock, dust, earth and shale.

### **2.1.4 The National Sand Harvesting Guidelines, 2007**

These are secondary legislation that apply to all sand harvesting activities in Kenya and are aimed at ensuring sustainable utilization of sand resource and proper management of the environment.

### **2.1.5 Case laws**

In the case of **Celestine John Aoko & others v Shem Owino Muga & 7 others; Amicus Curiae Kenya National Commission on Human Rights [2019] eKLR**, the Applicants claimed that sand harvesting had caused flooding in their farms, broken dykes and created pits which posed a safety risk amongst other hazards.

*"The Court held that the National Environment Management Authority (NEMA) retains regulatory powers over sand harvesting activities through the National Sand Harvesting Guidelines, 2007, issued pursuant to Section 42 (4) of EMCA."*

In the case of **John Muthui & 19 others v County Government of Kitui & 7 others [2020] eKLR**, the petitioners claimed that River Tiva in Kitui had dried up because of sand harvesting. The Court recognized that sand harvesting is necessary for economic development but upheld the principle of sustainable development and its auxiliary principles of intergenerational equity, precautionary principle, and sustainable, prudent, equitable and wise use. It granted conservatory orders against permitting sand harvesting as the activity constituted a threat to the Petitioner's right to a clean and healthy environment

### **2.1.6 Other laws that have an impact in the mining sector (Sand harvesting)**

County Government Act, 2012, the Water Act 2016, Survey Act Cap 299, Agriculture Act Cap 318, Water Resource Management Rules, 2007, the Environmental (Impact Assessment and Audit) Regulations, 2003, Environmental Management and Coordination (Water Quality Regulations) 2007; and the Environmental Management and Coordination (Wetlands, Riverbanks, Lakeshores and Seashores Management) Regulations, 2009

Additionally, pursuant to Article 2 (5) and (6) of the Constitution of Kenya, 2010 the general rules of international law and any treaty or convention ratified by Kenya shall form part of the law of Kenya under this Constitution, 2010.

As discussed above, there are various laws at the National level that have a bearing on sand utilization and conservation of environment, however, the said laws are fragmented, outdated and not in concordance with the

Constitution of Kenya, 2010 thus making it difficult to effectively administer. This has created a lacuna in enforcement, thus according the unregulated groups and cartels a chance to establish monopolies to illegally over-exploit sand resource.

The greatest losers in the prevailing circumstances are the environment through degradation and loss of ecosystem, the community through lack of water, destroyed infrastructure, social ills among others, and the County government in terms of revenue lost through pilferage.

Article 185 4(a) stipulates that County Assemblies may receive and approve plans and policies for the development and exploitation of the County's natural resources.

This policy thus endeavors to empower the community in decision making and playing an active role in matters sand utilization, environmental protection, conservation and rehabilitation.

## **2.2 Market Demand**

The demand for Kitui sand is primarily driven by the construction and infrastructure sectors. This demand continues to increase due to rapid urbanization fueled by devolution, population growth, and industrialization. The National Housing policy for the affordable housing has further increased the demand for good quality sand for the construction sector and Kitui county sand is highly valued. This policy will put into perspective a balance between meeting the market demand for Kitui Sand and environmental protection through a structured approach to sand harvesting.

### **2.3 Socio- Economic issues**

Unregulated sand harvesting in Kitui County has led to increased negative social impacts including higher insecurity, sand wars, destruction of property, displacement of persons, loss of lives and livelihoods, proliferation of drugs and substance abuse, high illiteracy due to school dropouts, teen pregnancies, HIV/AIDs and STIs within sand harvesting areas.

Sand harvesting within the County is mainly dominated by cartels including brokers, loaders and gangs. These sand dealers do not take into consideration the opinions of the riparian community despite the negative impacts occasioned by unregulated sand harvesting activities. Furthermore, the local residents are paid peanuts for the sand, which is mainly transported and used outside the County, making it difficult for the community members to develop themselves from the meagre earnings.

By regulating sand harvesting sector in the county, the County Government of Kitui will ensure access to improved livelihoods and positive socio-economic impacts to the local community directly through employment creation especially in collection, loading and transportation of sand and indirectly through use of local goods and services. Further, issues of Gender Equity and Social Inclusion (GESI) will be mainstreamed in the sand value chain management. In addition, the County Government will benefit through improved own sourced revenue generation.

### **2.4 Environmental Issues**

Unregulated sand harvesting has led to severe environmental impacts such as land degradation, loss of farmlands, and creation of river plains,

collapsing of riverbanks, drying of riverbeds, flooding, water pollution, air pollution and loss of river ecosystem. A well-regulated sand harvesting sector will put into consideration environmental protection, conservation and rehabilitation.

## **2.5 Data, Technology and information gap**

Sand is available in different quantities in various rivers in the County depending on stages of river formation and the level of utilization, with some of the Basins having been almost depleted while others have plenty of Sand. Whereas there is some data on the quantities of sand being extracted and transported from the rivers, data on the existing quantity in the rivers across the county is scanty. This justifies the need for research to document the potential of sand resource in the county's five Basins.

Standard Operating Procedures (SOPs) and Occupational Health and Safety concerns (OHS) are blatantly ignored thus exposing those involved to extreme danger. Worse still, sand harvesting has no known standards of measure either for the material or for labour compensation. Sand extraction is majorly done using crude tools such as shovels/spades and jembes disregarding safety of the loaders. Further, the welfare of the loaders is left at the mercy of the cartels driving the sand sector.

This policy therefore, will put in place mechanisms for addressing data gap concerns through a base-line study to establish the quality, quantity and value of sand available within the Basins and create a database for the same. To address the vulnerability of workers in the sand sector, there will be need to put in place SOPs and address Occupational Health and Safety (OHS) concerns for workers in the sector.



## **2.6 Infrastructure**

Over time, the County Government has invested in good infrastructure including water (sump wells, sand dams/subsurface dams and other water harnessing structures), roads, culverts and bridges among others. However, unregulated and unsustainable sand harvesting activities have led to negative effects on the aforementioned infrastructure by heavy commercial vehicles, washing away key infrastructural installations by floods and land degradation due to over exploitation of the sand resource. The policy has recommended measures to ensure the infrastructure is protected from destructive processes.

*'The massive sand mining industry is often forgotten. It happens on a vast scale, is poorly regulated, and can be catastrophic for humans, animals and plants.'*

*Masterson, Andrew. 2017 Earth Science Journal*

### **3.0 Policy goal, guiding principles objectives and strategies**

#### **3.1 Policy Goal**

The overall goal of the Kitui County River Basins Sand Utilization and Conservation Policy is to ensure environmental conservation through appropriate regulation for sustainable sand utilization

#### **3.2 Guiding Principles**

- i. Environmental protection, conservation and restoration
- ii. Sustainable utilization and Value addition of sand resource
- iii. Equitable sharing of accruing benefits
- iv. Effective enforcement and compliance
- v. Inclusive community participation
- vi. Mainstreaming Gender Equity and Social Inclusion

#### **3.3 Policy Objectives and Strategies**

This policy has put in place objectives that it aims to achieve through implementation of a number of accompanying set strategies;

### **3.3.1 To provide a legal and institutional framework for sustainable management of the sand value chain**

- i. Putting in place a River Basins Sand Utilization and Conservation Bill to streamline all sand value chain activities in the river Basins
- ii. Establish specific licensing regimes for the sand dealers and groups
- iii. Provide guidelines for identification and operationalization of sand harvesting sites and aggregation yards
- iv. Establish institutional structures that shall oversee and manage the entire sand value chain
- v. Provide guidelines for identification and establishment of River Basin Caretaker Committee members, Site Based Community (Sand) Groups and River Basin Based Cooperative Societies
- vi. Develop guidelines for capacity building and awareness creation for the Site Based Community (Sand) Groups and River Basin Based Cooperative Societies
- vii. Put in place enforcement mechanisms to ensure compliance to the laid down regulations
- viii. Establish mechanisms for standard and unified measure for weighing and pricing of sand resource.

### **3.3.2. Provide a mechanism for community involvement in environmental protection, conservation and restoration**

- i. Establish River Basin Based Cooperative Societies and Site Based Community (Sand) groups to undertake the environmental protection, conservation and restoration programs

- ii. Establish capacity building, sensitization and awareness creation programs on importance of undertaking Environmental, social impact assessment, environmental audits and other environmental matters
- iii. Develop and implement River Basin Based environmental management plans
- iv. Put in mechanisms for delineation of riparian land for effective protection, conservation and restoration
- v. Establish mechanisms for resource mobilization for undertaking environmental protection, conservation and restoration activities

### **3.3.3 Establish mechanisms for sustainable sand harvesting, utilization and management of sand resource**

- i. Establishment of River Basin Based aggregation yards
- ii. Set up Standard Operating Procedures for identification, opening, closure and rehabilitation of sand harvesting sites
- iii. Initiate programs that encourages establishment of cottage industries for value addition including streamlining branding, marketing and pricing of sand and sand products

### **3.3.4 To provide a framework for equitable sharing of sand value chain benefits between the county government and the communities in the sand River Basins**

- i. Design mechanisms for sharing benefits accruing from sand value chain, between the county government and the River Basin based communities

- ii. Establish a framework for promoting local content in the sand value chain.
- iii. Establish mechanisms for ensuring optimal realization of revenue.
- iv. Set mechanism for Corporate Social Responsibility (CSR) programs for communities affected by sand harvesting activities
- v. Put in place measures for participatory community engagement on issues sand harvesting and management
- vi. Streamline governance structures to ensure equitable sharing of accruing benefits

### **3.3.5 Mainstream gender equity and social inclusion in the sand value chain activities**

- i. Institute measures to ensure that all stakeholders, regardless of gender, social status, or economic means, are included in the sand value chain activities.
- ii. Undertake gender analysis of the sand value chain to identify areas where gender equity and social inclusiveness is lacking.
- iii. Put in place measures and programs that promote engagement of marginalized persons and special groups such as persons living with disabilities, the elderly and youth with a view of creating equitable opportunities of the sand resource in the value chain.
- iv. Incorporate programs that protect vulnerable persons including women, youth, people living with disabilities and children to prevent and mitigate specific social evils associated with sand harvesting.
- v. For instance, spread of HIV/AIDS and STDs, teen pregnancies, domestic violence, drug abuse, riparian land ownership disputes,

inheritance disputes, child labor and other social issues associated with sand harvesting that are likely to occur.

*The World is Running Out of Sand: The little known exploitation of this seemingly infinite resource could wreak political and environmental havoc.*

*Aurora Torres, et al., 2017, Smithsonian Science Journal*

## 4.0 Institutional Framework

The policy recommends a robust institutional and regulatory framework of the Kitui County River Basins Sand Utilization and Conservation Sector. This is crucial for the realization of the sector’s full economic potential that balances between sustainable sand harvesting while addressing the associated social and environmental concerns.

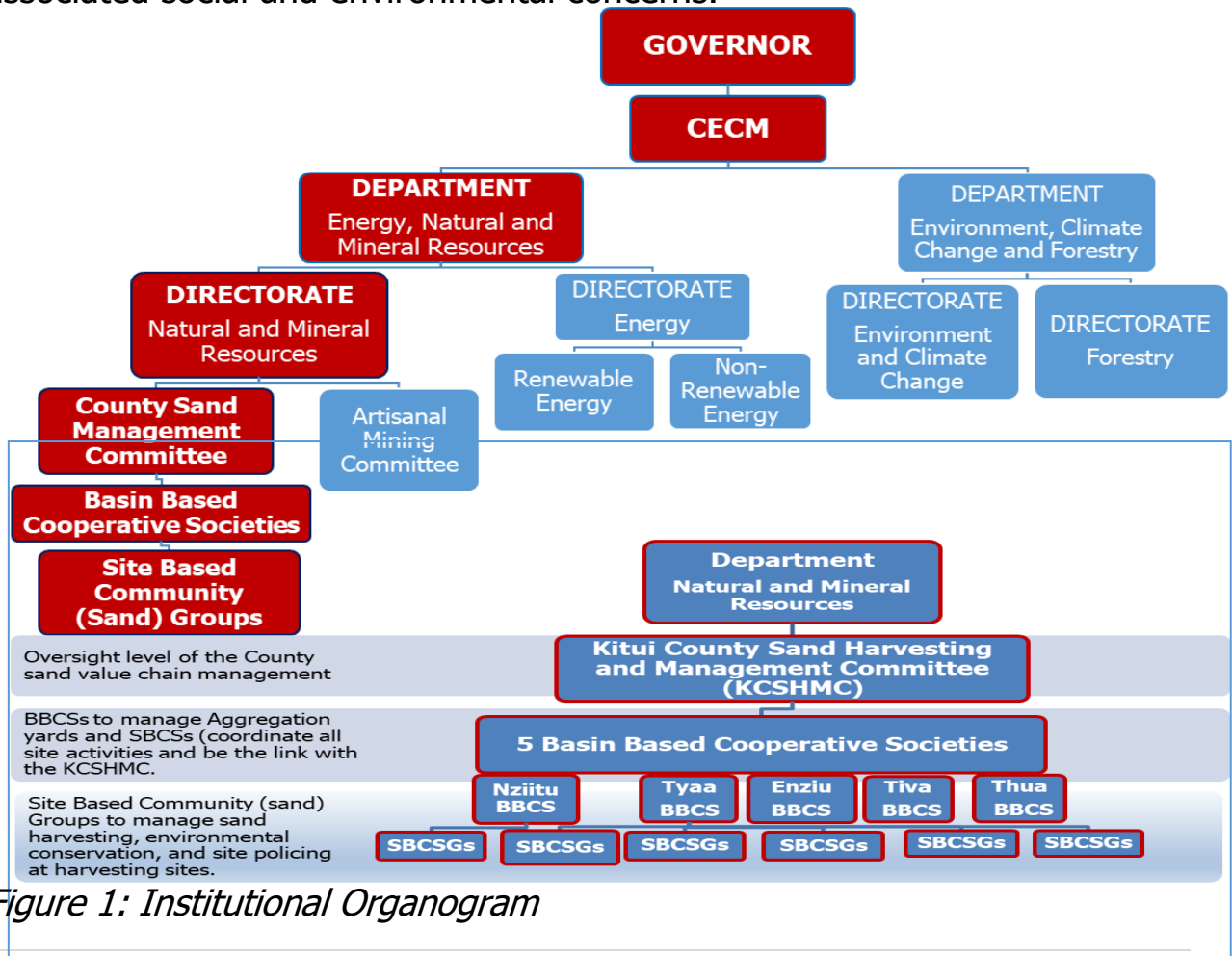


Figure 1: Institutional Organogram

The institutional structure shall comprise of **Kitui County River Basins Sand Utilization and Conservation Committee, River Basin Based Cooperative Societies** and **Site-Based Community (Sand) Groups**. There shall be established a River Basin Caretaker Committee to pioneer the formation of the River Basin Based Cooperative Societies. This committee shall hold office for a term not exceeding sixty (60) days.

The above institutional structures shall oversee sustainable utilization of the sand resource that promotes environmental protection and conservation and ensures a sound framework for community participation and equitable sharing of accruing benefits.

The Kitui County River Basins Sand Utilization and Conservation Committee shall be domiciled in the Directorate responsible for Natural and Mineral Resources.

#### **4.1 Directorate of Natural and Mineral Resources**

The Ministry responsible for Natural and Mineral Resources has the responsibility for policy implementation and oversight through a Directorate. The Directorate shall be responsible for enforcement and compliance, collaborating with other County and National Government Ministries, Departments and Agencies, the County Assembly, the private sector and other key stakeholders in streamlining all sand value chain activities in the river basins.

The Directorate will be headed by a Director competitively sourced and/or seconded by the County Public Service Board and shall be in charge of administration and management of the policy and laws relating to sand value chain. The Director shall provide technical services; recommend



issuance of licenses and permits upon vetting, approval and recommendation by the committee. The Director shall also undertake regular monitoring, compile, analyze and disseminate relevant data and lessons learned; ensure effective dispute resolution among the players, and sustainable implementation of all programs under the Directorate.

The Director shall report to the County Executive Committee Member (CECM) through the Chief Officer. The CECM shall in turn report to the Governor.

## **4.2 Functions of the Directorate**

- i. Organizing and conducting public sensitization forums in all the Basins including use of diverse media to educate people on good governance prior to nominations of their leaders
- ii. Presiding over identification and nomination of the River Basin Cooperative Caretaker Members and elections of the River Basin-Based Cooperative Societies committee members
- iii. Provision of technical support (formulation of group by laws, training and capacity building, financial management, value addition, group dynamics and Standard Operating Procedures among others) to the County River Basins Sand Utilization and Conservation Committee, the River Basin-Based Cooperative Societies and the Site-Based Community (Sand) Groups
- iv. Monitoring and ensuring Compliance to the set guidelines in respect to Kitui County River Basins Sand Utilization and Conservation Committee, and River Basin-Based Cooperatives

- and Site-Based groups formations, operations and prepare advisory to the CECM.
- v. Identify policy implementation gaps and make recommendations to the CECM through the C.O responsible for Natural and Mineral Resources
  - vi. Design and prepare licensing provisions in consultation with the CECM
  - vii. Oversee day to day operations of the of Directorate Administration and management of the policy and laws relating to sand value chain.
  - viii. Review recommendations from the Kitui County River Basins Sand Utilization and Conservation Committee for issuance of licenses and permits and advise the CECM through the Chief Officer (C.O).
  - ix. Undertaking regular monitoring of Sand Value chain activities; compiling, analyzing relevant data and making quarterly and annual reports to the CECM through the C.O responsible for Natural and Mineral Resources
  - x. Undertaking and co-coordinating research, investigation and surveys in the field of sand conservation and utilization, collect, collate and disseminate information about the findings of such research, investigation or survey to the sub-sector players
  - xi. Act as liaison officer between the ministries, departments and other organizations for sustainable utilization of sand resources and effective conservation

- xii. To analyze and/or synthesize quarterly and annual reports for advice and decision making in consultation with the C.O and the CECM
- xiii. Ensure effective Conflict resolution mechanism is instituted at the SBCSGs, BBCS and the County Committee level.

## **4.2 Kitui County River Basins Sand Utilization and Conservation Committee**

Kitui County River Basins Sand Utilization and Conservation Committee shall, coordinate countywide oversight role on all matters sand harvesting and management in the county and shall report to the sector Directorate. The Committee will ensure effective coordination of all the activities in the sand value chain and act as a link between the County Government and the River Basins Based Cooperative Societies. It shall vet, approve and give recommendations for consideration, in writing, to the licensing authority on granting, rejection, renewal, revocation and transfer of licenses. The committee shall prepare and submit, to the Directorate, comprehensive reports on all matters pertaining to sand value chain and performance of institutions under its jurisdiction on a quarterly basis.

## **4.3 River Basin - Based Co-operative Societies**

The county shall have five (5) River Basin Based Co-operative Societies, one in each of the following river basins; Nziitu, Enziu, Tyaa, Thua and Tiva.

The River Basin Based Cooperative Societies (RBBCS) shall be constituted, registered and regulated in accordance to Article 185 (2) and 186 (2) of

the Constitution of Kenya, 2010 read together with the Fourth Schedule Part II Function 7(e).

#### **4.3.1 Establishment of the River Basin Based Co-operative Societies (RBBCSs)**

The River Basin Based Co-operative Societies (RBBCSs) shall be comprised of members from registered Site-based Community (Sand) Groups in the respective Basin catchment in line with the objectives of this Policy.

There shall be two stages in establishment of the RBBCSs;

- i. An interim River Basin Based Co-operative Caretaker Committee (RBCCCC)
- ii. River Basin Based Co-operative Societies (RBBCSs)

##### **4.3.1.1 The interim River Basin Based Co-operative Caretaker Committee (RBCCCC)**

The procedure for nomination of River Basin Co-operative Caretaker Members shall be as follows:

- i. The Directorate shall, in liaison with the Ward Administrators, convene and facilitate the initial meetings in each river Basin to identify and nominate members of River Basin Cooperative Caretaker Members (RBCCMs)
- ii. The identification of the above shall be done through public participation meetings at Ward level
- iii. Each Ward shall nominate three (3) persons (1 youth, 1 male and 1 female) to the RBCCC
- iv. The RBCCMs shall be residents who have lived continuously within the Wards in a river Basin for not less than six years prior to nomination date

#### 4.3.1.2 Nomination process

The identification and nomination of the RBCCMs shall be as follows:

- a) The Director or a Representative shall preside over the nomination of the RBCCMs while ensuring adherence to the two thirds (2/3) gender parity rule.
- b) In order to nominate the RBCCMs, the presiding officer will ask the Ward representatives to consider using negotiation/consensus as a method of nominating the RBCCMs. If consensus method of nomination fails, the presiding officer shall conduct an election for the purpose.
- c) The procedure for the identification and nomination shall be as follows;
  - i. The Director shall brief the members on eligibility criteria for nomination in each category (youth, male and female)
  - ii. The presiding officer shall use uniform/identical ballot papers where one (1) will be marked '**YES**' and the others marked '**NO**' and fold them uniformly then place them in a container for each category of the Ward representatives
  - iii. The ballot papers shall be publicly unfolded and shown to all members present under each category.
  - iv. The representative with the ballot paper marked '**YES**' shall have been nominated as an interim member of the RBCCCs
  - v. Upon completion of all Ward representative nomination as members of the RBCCCs, the presiding officer shall verify if the nominated members meet the two thirds (2/3) gender parity rule.

- vi. If the required gender parity rule is attained, then the nominated members shall constitute the RBCCC and the Director shall forward the details of Name, ID No., Phone Number, Ward, Village, Age and Gender (male or female) to the Chief Officer responsible for department of Natural and Mineral Resources to forward to the CECM.

#### **4.3.1.3 Eligibility**

- i. (S)he must be a resident of a ward within a specific river Basin that is, must have lived in that particular Ward a continuous period of not less than six years prior to the appointment date
- ii. Must meet the requirements of Chapter 6 of the Constitution
- iii. A respectable person and relates well with other community members
- iv. Able to read and write (Basic Education credentials)
- v. Creative, hardworking and responsible.
- vi. A role model (good example into matters of sand value chain and development).
- vii. Approachable and able to motivate others.
- viii. Available and willing to sacrifice personal time to serve the community as a volunteer (Strong commitment to the values and principles of volunteerism)
- ix. Must be 18 years and above
- x. Not occupying a public or elective position or a leader of any other community –based group
- xi. Should be a law-abiding citizen with no criminal record

- xii. Ability to engage and communicate key messages with individuals and organized groups
- xiii. Must be able to read and write (minimum KCPE certificate or its equivalent)
- xiv. Must not have been convicted of an offence under environmental or any other laws

#### **4.3.1 Establishment of River Basin Based Co-operative Societies (RBBCSs)**

The RBCCMs shall hold a meeting on a later date to deliberate on;

- i. Election of interim officials (5-9) members ensuring gender parity and social inclusion
- ii. Prepare interim by laws for purposes of registration
- iii. Apply for registration of River Basin Based Co-operative Societies (RBBCSs with the County Ministry responsible for Cooperatives
- iv. The RBCCMs, will mobilize members of the community for the recruitment to the Site Based Community (Sand) Groups as guided by the criteria of group formation under this law

##### **4.3.2.1 Inaugural meeting**

The first General meeting shall be held within 60 days after completion of the registration process and acquisition of certificate,

The agenda for the first General meeting shall be to;

- i. Elect bona fide River Basin Based Co-operative Society Committee officials.
- ii. Appoint auditor of the society
- iii. Appoint society`s Legal Advisor

#### **4.3.2.2 FUNCTIONS OF RIVER BASIN BASED CO-OPERATIVE SOCIETIES**

The River Basin Based Co-operative Societies shall be;

- i. Responsible for ensuring sustainable utilization of sand resources within a basin including and not limited to protection, conservation, restoration and rehabilitation of the basin ecosystem.
- ii. Responsible for ensuring plough back of 50% of the accrued benefits to the community for conservation and 20% for Corporate Social Responsibility (CSR) while ensuring that members' shares are prudently managed.
- iii. Carry their business in conjunction with the Kitui County River Basins Sand Utilization and Conservation Committee and ensure participation of Site Based Community (sand) Groups in decision making.
- iv. Facilitate training and capacity building of member groups; recommend suitable sites for opening and exhausted sites for restriction.
- v. Recommend for cessation, suspension or curtailment of activities in respect to sand harvesting licenses; fees, charges and sharing of accrued benefits; and
- vi. Perform any other pertinent matters referred to it and ensure adherence to all license requirements



#### **4.4 Site Based Community (Sand) Groups**

The Site Based Community (Sand) Groups (SBCSG) will comprise of community members involved in the sand value chain at the local level. All Community members involved in sand harvesting at designated sites must be members of a registered community group. The SBCSG shall liaise with the Basin Based Cooperative Societies in order to effectively implement protection, conservation and rehabilitation of the river ecosystems affected by sand harvesting.

The SBCSG shall also play pivotal role in the identification of potential new sites to be harvested, sites to be closed, rehabilitated, undertaking community policing, ensure there is no child labor, sites are free of drug and substance abuse and mainstreaming of gender and social inclusion (GESI) in the sand value chain. Further the groups shall be required to maintain data and submit records on monthly basis to the Basin Based Cooperative Societies and retain copies of the same.

##### **4.4.1 Criteria for Group Formation and membership eligibility**

- i. SBCSG formation in a particular area shall be determined by proximity to the location of Aggregation Yards
- ii. A radius of 5kms within a catchment area shall be allowed to accommodate only one licensed SBCSG at any one particular period
- iii. Group Members (Riparian, loaders and interested members of the community) must be residents of the respective catchment area who must have resided in the community for at least six (6) years

- iv. Must be registered with the Office of the County department responsible for Cooperatives
- v. An individual can only belong to one group
- vi. Must be above 18 years old
- vii. Must not have been convicted of a criminal offence

#### **4.4.2 Responsibilities of the Site-Based Community (Sand) Groups**

- i. Acquire the required registration certificates and ensure renewals
- ii. Ensure sustainable sand harvesting and environmental protection
- iii. Comply with the Standard Operating Procedures determined by the Basin-based Cooperative Societies
- iv. Report on progress to the Basin Based Cooperatives as required
- v. Have in place conflict resolution mechanism for Group members
- vi. Coordinate all site activities with the Basin Based Cooperatives
- vii. Open and operate group bank account(s)
- viii. Ascertain destinations of the sand harvested from their sites and report offenders
- ix. Groups shall not be allowed to aggregate sand

#### **4.4.3 Process of Creating Site-Based Community (Sand) Groups**

The River Basin Caretaker Committee Members shall initiate the formation of the initial Site-based community (sand) groups. This function shall be transferred to the Basin-based Cooperative Society committee after they are formally constituted

The respective Basin-based cooperative committee (River-basin cooperative Caretaker Members) shall:

- a) Sensitize the community on Site-based Community (Sand) group formation
- b) Facilitate the formation of the Site-based Community (Sand) groups
- c) Facilitate election of office bearers of the Site-based Community (Sand) groups
- d) Elected Site-based Community (Sand) group Committee members shall lead their groups in the formulation of by-laws and facilitate registration through County department in charge of Natural and Mineral Resources.

**NB:** Format of registered names shall be in the form: "*Name of the Group*" followed by *Site-based Community (Sand) groups* office bearers shall open a group account with a bank of their choice, with four signatories (three must sign, with the chair's signature being mandatory). Group membership will range between a minimum of 20 and a maximum of 100 members.

- e) Each group will have office bearers as follows;
  - i. Chairperson
  - ii. Vice chairperson
  - iii. Secretary
  - iv. Vice- secretary
  - v. Treasurer
  - vi. Trustee/ Patron
  - vii. Three committee members elected by the group members

**NB:** The two-third gender rule; and PLWD and trans-generational considerations to be observed in electing the office bearers.

#### **4.4.4 Eligibility to be elected as an Office Bearer**

- a) Must belong to a registered group within the Sand Basin
- b) Must meet qualifications for the position

No member shall be elected as an office bearer if (s) he:-

- c) Is not a member of the group;
- d) Is under eighteen years of age;
- e) Is unable to read and write;
- f) Receives any remuneration, salary or other payment from the group save in accordance with this Act;
- g) Is a committee member in another group;
- h) Is an un-discharged bankrupt;
- i) Is of unsound mind;
- j) Has been convicted of any offence under this Act or rules made here under;

There shall be an Ad-hoc Environment Protection, Conservation and Rehabilitation Committee; set up and elected from the general membership to oversee the following;

- i) Develop Site Based Environmental protection, conservation, and rehabilitation work plans.
- ii) Identify degraded riparian sites.
- iii) Identify measures for conservation and individuals/groups responsible for implementing the conservation measures
- iv) Liaise with the group management to identify resources to facilitate rehabilitation.
- v) Identify sites needing closure/opening to harvesting.

- vi) Implement plans/ work assigned in conjunction with the Basin Based Cooperatives.
- vii) Coordinate rehabilitation of degraded sites in conjunction with the management.
- Viii) Generate an annual environmental management report to be shared at the AGM and with the Kitui County River Basins Sand Utilization and Conservation Committee.

## **5.0 Implementation Plan**

The implementation plan for this policy is attached as Appendix I of this policy document.

## **6.0 Policy Review**

This policy shall undergo regular reviews to ensure they are up-to-date and still relevant to the goals of the sector. Reviews will be done as and when necessary, in response to emerging needs and demands.

## **7.0 Financing Mechanism**

The implementation of this policy shall be funded by County Government of Kitui through revenue generated from licensing/permits fees, including fines, penalties and benefits accruing from sand related revenue and grants from development partners.

The components to be financed include but not limited to plough back to the affected community in form of Corporate Social Responsibility (CSR) initiatives (20%); construction of classrooms and health facilities, bursaries for the needy, water supply and extensions, market solar lights among others. In addition, 50% of the accrued benefits shall be channeled back

for Environmental Conservation and Rehabilitation of degraded river ecosystems as prioritized by the community such as tree planting and growing, soil conservation activities, construction of water harvesting structures such as sand dams, earth dams, borehole drilling sump wells and any other water harnessing structure identified by the community.

## **8.0 Policy Risk analysis**

There are potential risks that must be assessed and effectively addressed in order for this policy to realize the desired goals and objectives.

### **8.1 Political environment**

The success of this policy shall largely depend on the support of the government of the day in its political agenda. The County Government shall ensure allocation of the necessary resources for effective implementation of the policy.

### **8.2 Environmental risks**

Unpredictable precipitation patterns within Kitui and neighboring counties due to climate change has affected the quantity and quality of sand in our river Basins and will most likely continue. The situation has been aggravated by over-harvesting of sand thus disturbing the natural environment leading to soil erosion, deforestation, and loss of biodiversity, water pollution, receding water table, water turbidity and other ecological problems. This policy will recommend strategies that ensure a balance between rate of extraction of sand resource and retaining some safe levels of sand in the river for water retention and environmental safety. Sand extraction shall not exceed 30% of the initial (natural) depth of sand in a

particular harvesting site and in any case should not leave undersurface water in the river exposed.

### **8.3 Social risks**

There is a risk of riparian community displacement due to sand harvesting wars, resource conflicts and social unrest caused by the disruption of local economies and lifestyles. These shall be evaluated to ensure the policy protects the interests of the community. The affected community will be consulted in making decisions on utilization of sand resource. The accrued benefits realized from the sand resource shall be equitably shared and ploughed back to improve the social lives of affected communities through structured regulatory frameworks.

### **8.4 Economic risks**

In cases of unpredictable changes in demand for sand and changes in legislation that may affect sustainability, there will be need to mitigate this through involving members of the community in decision making on economic issues affecting them.

## **9.0 Monitoring, Evaluation and Learning**

The policy shall ensure mainstreaming of constant Monitoring, Evaluation and Learning (MEL). These are essential processes to measure the progress, and impacts of the policy implementation; involving routine data collection and use of insights and lessons learned to improve the programme design and implementation. The Monitoring, Evaluation and Learning framework for this policy is attached as **Appendix II**.

*'A legal framework to regulate mining (sand) activities requires cooperation amongst all the sectors and stakeholders involved, an appropriate regulatory framework, monitoring, enforcement and efficient control systems'*

*Leal Filho, W. et al., The Unustainable use of Sand: Reporting on a Global Problem. Sustainability. 2021.*