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MUNICIPALITY OF EMBU

RISK MANAGEMENT FRAMEWORK

July 2023

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ABBREVIATIONS AND ACRONYMS

CIDP	Embu County Integrated Development Plan
COSO	Committee of Sponsoring Organizations
CPCT	County Project Coordination Committee
KUSP	Kenya Urban Support Programme
LI-HP	Low Impact-High Probability
LI-LP	Low Impact-Low Probability
MI-MP	Medium Impact-Medium Probability
MoE	Municipality of Embu
PFM	Public Finance Management
POM	Project Operation Manual
RMF	Risk Management Framework
UDG	Urban Development Grant
UNESCO	United Nations Educational, Scientific, and Cultural Organization
WFP	World Food Programme

FOREWORD

The legislative provisions according to the Constitution of Kenya (2010), outlines the Principles of Public Finance that guide all the aspects of public finance. Further the Public Finance Management Act, 2012, obligates the County Government to conduct risk-based, value-for-money and systems audits aimed at strengthening internal control mechanisms that could have an impact on achievement of the strategic objectives of the entity. The Treasury Circular also provides a policy framework for developing and implementing customized Risk Management strategies in public institutions. All these legal provisions form a fundamental basis for development of risk management strategies, system of risk management and institution of internal control that builds robust business operations. Other governing documents, among them, the Mwongozo Code of Governance for state Corporations, require among other things development of a framework on risk management. These documents take into account sustainability ethics and compliance risks, review of the implementation of the risk management framework in a quarterly basis and establishment of a risk management function within the entity. The foundations and arrangements that incorporate this policy framework across the operations at all levels determine the success of risk management operations in the Municipality of Embu. The Risk Management Framework assures a systematic and proactive risk and opportunity management at the lowest practical management level and establishes a culture of risk awareness. This enhances capacity of the Municipality to achieve its strategic goals effectively and efficiently. The Risk Management Framework assists the Municipality in detecting fraud and mitigating corruption by taking a strategic risk mitigation action in response to risks. The framework gives the Municipality officers the authority to control risk to reasonable levels and to take calculated measures. This document increases confidence with all Municipality stakeholders as it incorporates risk management into their daily jobs and operations.

Dr. Esther Nthiga
Municipal Board Chair

PREFACE

The growth of urban population is on an accelerating mode, with the global urban population is projected to grow by 2.5 billion more by 2050. Projections point that urban areas will face risks from sea level rise, heat, increase in tropical cyclones, storm surge, intense rainfall and coastal flooding. These threaten the global development focus with more adverse impact on the developing countries; among which is Kenya that is largely dependent on rain-fed agriculture and tourism. Having the Municipality of Embu with a number of informal settlements situated in the periphery of the Central Business Unit, flooding is a likely occurrence. The same informal settlements are often under-served by proper sanitation or sewage facilities. Variations in seasonal morbidity or mortality have also been observed and are understood to occur as the result of prolonged exposure to flood waters and living in very damp, unhygienic conditions. Other risks include land and mud-slides, tree-falls and draughts in the lower part of the Municipality. The Municipality of Embu stands to win in sustainability of development projects for provision of polished methodology of risk identification and analysis of occurrence and impact. The assessment leads to integration of solutions, the buy-in of the desire of the stakeholders.

Catherine Nyaga
Municipal Manager & Municipal Board Secretary

ACKNOWLEDGEMENT

Special appreciation to the Municipality of Embu technical team for the unreserved contribution during the development of the Risk Management Framework. Your great work will go a long way in the annals of the history of the Municipality of Embu for laying the foundation of safety for development.

Special gratitude to the following:

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4. Special regards and appreciation to the great team comprising of: -
   (i) Catherine Nyaga -Municipal Manager &Board Secretary
   (ii) Jacob Kariuki Gititi- Director Urban Development
   (iii) John Njeru Mucira -Deputy Director Administration - Municipality of Embu
   (iv) Dennis Munene -Finance Officer Municipality of Embu
   (v) Nicholas Mogaka Barare – Legal Officer -Embu County

   for technical expertise in the development of this Framework.

CHAPTER ONE:
INTRODUCTION

1.1 Background

Risk is the chance that a circumstance or activity will have a negative effect on the outcome of an event. Risk Management Framework (RMF) is a guideline used by institutions to identify, eliminate and minimize risks.

The Municipality of Embu RMF outlines the activities and steps that ensure awareness of the risks, provides modalities of management and recognizes the probable impact of the risk.

1.2 Legislative Rationale

The legislative requirements will be achieved through development of the risk management policy framework for the Municipality. This RMF is overarched on the following legislative provisions:

i) *Constitution of Kenya (2010),* Article 201 that outlines the Principles of Public Finance that guide all the aspects of public finance.

ii) *Public Finance Management Act, 2012,* Section 155 (3) (b) obligates the County Government to conduct risk-based, value-for-money and systems audits aimed at strengthening internal control mechanisms that could have an impact on achievement of the strategic objectives of the entity (in this case the Municipality).

iii) Treasury Circular No. 3/2009 of 23rd February, 2009 which provided a policy framework for developing and implementing customized Risk Management strategies in public institutions. This Circular required all heads of public institutions to develop and implement a risk management framework as a fundamental step to establishing proactive, accountable and innovative public service.

iv) The Public Finance Management Act Regulations of 2015 Sec. 165 (1) requires accounting officers to ensure that government entities develop;

(a) risk management strategies, which include fraud prevention mechanisms; and
(b) a system of risk management and internal control that builds robust business operations.

v) The Mwongozo Code of Governance for state Corporations, requires among others the following on risk management;

(a) The development of a policy on Risk Management which should take into account sustainability ethics and compliance risks.
(b) Review the implementation of the risk management framework in a quarterly basis.
(c) Establish a risk management function within the entity.

vi) Internal Auditor General and steps taken to support Risk management Initiative in the public sector.

vii) On the area of advisory services, the PFM Act further requires the department to support public sector entities to establish and implement risk strategies to support their operations.

viii) ISO 9001:2015 Quality Management Systems, ISO 31000:2018 Risk Management Standard, the Mwongozo Code of Governance for State Corporations, 2015, the Embu County Integrated Development Plan (CIDP) 2023-2027

The foundations and arrangements that incorporate this policy framework across the Municipality's operations at all levels will determine the success of risk management operations in the Municipality of Embu.

1.3 Risk Management Principles

The principles guiding the Risk Management Framework for the Municipality of Embu are:

1.3.1 Risk identification

This is the first principle where risks are presented. They postulate chances of occurrence and probable effects.

1.3.2 Risk analysis

This stage involves gathering data and considering the meaning of the data points over a span of time. An analysis of the identified risks depicts the frequency and severity of the risk.

1.3.3 Risk control

Risk control offers opportunities to implement solutions that support risk avoidance, prevention and reduction.

1.3.4 Risk financing

This fourth principle focuses on the economics of risk. Risk financing is a way to cover any financial losses that the implemented risk control techniques did not prevent from happening.

1.4 Outcomes of the RMF

a) Manage risks proactively, including those involving beneficiaries, personnel, finances, other resources, assets, programs, reputation, and interests.
b) Evaluate the Municipality of Embu risk tolerance.
c) Maintain a balance between the expense of risk management and the potential rewards of taking risks.
d) Take the necessary precautions in a timely manner to contain any hazards that materialize and lessen their effects.
e) Assure systematic and proactive risk and opportunity management at the lowest practical management level.

1.5 The Risk Management Framework Objectives

The RMF establishes a culture of risk awareness and management. It seeks to increase the Municipality's capacity to achieve its strategic goals effectively and efficiently. It means establishing an atmosphere that reduces surprises, adds value to operational tasks, and informs the stakeholders about results and progress.

Specifically, RMF will seek:

i) To assist the Municipality in managing risk incidents efficiently by developing mitigation strategies, procuring insurance, and using risk management procedures consistently.
ii) To integrate risk management into the culture of the Municipality Management.
iii) To ensure Management of risks in accordance with best practice, so that they are eliminated or controlled to an acceptable level.
iv) To enhance the delivery of the Municipality by ensuring that all the risks are considered.
v) To Ensure that the Municipality and other stakeholders receive accurate reporting on the risks identified by the risk management process.
vi) To ensure that the use of risk management data as a foundation for accountability and decision-making at all pertinent Municipality levels.
vii) To ensure effective operational performance by controlling risks that could jeopardize performance and encourage the investigation of novel solutions to institutional and development difficulties.
viii) To enhance financial performance through cost-effectiveness, controlled internal fraud, and promote efficient utilization of resources.
ix) To increase the level of assurance in the management of important risks.
x) To promote the Municipality of Embu's standing as a values-based and risk-aware government.
xi) To offer a methodical approach to risk identification and management.
xii) To ensure scrutiny on assessing risk levels to stay within the acceptable risk appetite, provide a consistent risk assessment criterion.
xiii) To improve adherence to the ethics, values, and good governance standards of the public sector.

1.6 Need Analysis

The Municipality of Embu carries out projects funded by the World Bank through the State Department of Urban Development under the Kenya Urban Support Programme (KUSP). Projects undertaken under KUSP should have minimum or no risk at all in their implementation and usage. The Board Committee mandated with Audit and Monitoring carries out the Management Risk analysis to establish the level of risk on implementation of any project/ programme within the Municipality. Before the onset of any programme/project, a gap analysis is undertaken, that informs the mitigation measures to reduce any foreseeable risk. The Municipality requires to do the following:

i) Detect fraud and mitigate corruption.
ii) Take a strategic risk mitigation action in response to risks.
iii) Carry out routine evaluation of management risk.
iv) Incorporate internal audit as a third, impartial assurance regarding risk management.
v) Keep up to date risk register.
vi) Publish whistleblower policy on Municipality website.

vii) Establish a Risk Management Committee.

1.7 Issues to be Addressed

This RMF addresses the following issues of concern:

a. Risk management and the underlying legal framework.
b. Integration of risk management in planning and performance evaluation.
c. Emerging issues in risk management.
d. Ethical values and governance standards.
e. Budgeting for risk management initiatives.

1.8 Types of Risk

The Committee of Sponsoring Organizations (COSO) framework provides the basis for the various types of hazards:

a) **Strategic Risks** – These are risks related to the operational divisions and agencies' and the municipality's overall strategic objectives.

b) **Financial Risks –** These are risks related to the long-term viability and financial stability of the Municipality activities.

c) **Compliance Risks**– These are risks related to Municipality adhering to the legal, administrative and governance standards.

d) **Operational Risks -**These are risks arise from daily operations, implementation of projects/ programs in the short, medium, and long terms.

e) **Leadership Risks -**These are risks related to management's execution of daily business of the Municipality.

f) **Reputation Risk –** These are risks that arise out of employees' actions or inactions that damage the reputation of the municipality.

g) **Information Security Risk -**These are risks that arise from inappropriate information exposure.

CHAPTER TWO:
RISK-MANAGEMENT TECHNIQUES

2.1 Approaches to Management Risks

An analysis of the various risk management strategies is provided in this chapter. The Municipality of Embu pledges to put in place a thorough framework for risk management, to have an open and receptive attitude to addressing issues related to risk management, and to make sure that risk management is integrated into all procedures carried out by the government. The risk management strategy implemented is based on best practices from around the world, particularly the COSO and ISO Framework approaches, which have been taken into consideration.

2.1.1 ISO 31000: 2018

Along with COSO, ISO 31000: 2018 is one of the two frameworks for enterprise risk management that are frequently used. Like COSO, the International Organization for Standardization, which has its headquarters in Geneva, Switzerland, has released ISO 31000: 2018 as a best practice in this area. The Standard is divided into guiding principles, an implementation framework, and a methodology.

2.1.2 Arguments in Defense of the COSO Framework

The performance and strategy of the Municipality are more integrated and linked with the COSO framework. The United States government and United Nations organizations like the World Food Programme (WFP) and the United Nations Educational, Scientific, and Cultural Organization (UNESCO) use the COSO framework extensively on a global scale. The majority of Kenya's institutions in the public sector have integrated the COSO framework into their enterprise risk management framework. Furthermore, everyone with supervisory responsibilities may quickly understand the COSO framework.

The Committee of Sponsoring Organizations of the Treadway Commission (COSO) is committed to demonstrating leadership in the creation of thorough frameworks and guidelines on internal control, enterprise risk management, and fraud deterrence designed to enhance organizational performance and oversight and to lessen the extent of fraud in institutions.

2.2 Risk management framework adopted by the Municipality

The Municipality adopts COSO framework in its approach to Risk Management. The COSO framework is a collection of guidelines that are incorporated in management five aspects:

i) **Governance and Culture**: Governance assigns supervision responsibilities for Municipality risk management, reinforces the significance of this practice, and sets the tone. The Municipality has to adopt a culture of moral principles, desired behaviors, and risk awareness. This is achieved by incorporating this aspect in the governance roadmap and integration of the same in the desired culture.

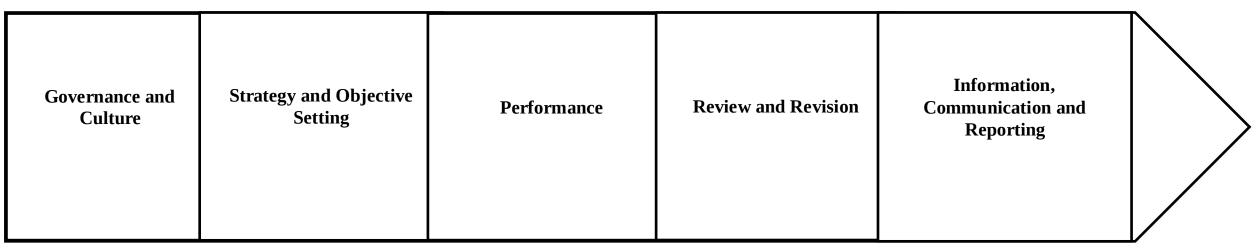
ii) **Strategy and Objective Setting**: The Municipality planning process and objective setting integrates risk management strategies, goal setting and roadmap. The Municipality objectives puts the set strategies into practice when detecting, evaluating, and responding to risk.

iii) **Performance**: The Municipality identifies and evaluate risks that affect its strategies in accomplishing objectives. This is done through ranking of risks in order of severity and choice of risk mitigation by developing a risk exposure portfolio.

iv) **Review and Revision:** The Municipality often assesses the effectiveness of the risk management components in light of significant changes and the required improvements.

v) **Information, Communication and Reporting**: The Municipality necessitates a constant flow of information within its jurisdiction and external stakeholders.

Figure 1: Municipality of Embu Risk Management Framework



Source: ***MoE CPCT*** *2023*

Table 1: The 20 Principles of RMF

GOVERNANCE AND CULTURE	STRATEGY AND OBJECTIVE SETTING	PERFORMANCE	REVIEW AND REVISION	INFORMATION COMMUNICATION AND REPORTING
1. Exercise Board Risk Oversight. 2. Establishes Operating Structures. 3. Defines Desired Culture. 4. Demonstrates Commitment to Core Values. 5. Attracts, Develops, and Retains Capable Individuals.	6. Analyzes business context. 7. Defines risk appetite 8. Evaluate alternative strategies. 9. Formulates business objectives.	10. Identifies risk. 11. Assesses severity of risk. 12. Prioritizes risks. 13. Implements risk responses. 14. Develops portfolio view.	15. Assesses substantial change. 16. Reviews risk and performance. 17. Pursues improvement in Enterprise Risk Management.	18. Leverages information and technology. 19. Communicates risk information. 20. Reports on risk, culture and performance.

Source: COSO 2017.

CHAPTER THREE:
PROCESS FOR MANAGING RISK

3.1 Introduction

The Municipality's risk identification process is based on an evaluation of the risks and other factors that could prevent the achievement of the established objectives in a cost-effective, time-effective, and efficient manner. The primary risks, possibility that they would materialize, and influence on the determined Municipality objectives are all factors that go into the identification process.

The Municipality carries out projects and programmes implemented through guidelines documented in the Project Operation Manual (POM). The risks are documented in a risk management register.

3.2 Risk Management Register

A Risk Register is a tool that helps to track issues and address problems as they arise in the course of project/programme implementation. It is usually shared with project/programme stakeholders, allowing those involved in the project or programme to be kept aware of issues and providing a means of tracking the response to issues. It can be used to flag new project or programme risks and to make suggestions on what course of action to take to resolve any issues. All projects and programmes face risks at one time or another.

Having a Risk Register in place simply provides a better means of responding to problems as they arise. The Risk Register is there to help with the decisions making process and enables managers and project stakeholders to handle risk in the most appropriate way. A risk does not need to be a threat to the project or programme, but an issue that can arise; if effectively managed, it should not prevent the project/programme from attaining its goals and objectives.

The Risk Register is a document that contains information about:

i) The identified project risks
ii) An assessment of the risk severity (i.e. its impact if it occurs);
iii) The likelihood of occurrence e.g. Medium (31-70%) or H-High (>70%); and
iv) A listing of the possible and preferred solutions to be applied.

By presenting the above information in a spread-sheet if an easy way to enhance awareness of risks and to be pro-active in addressing them. Setting up a Risk Register would start by recording all active risks along with the date the risk was identified, the date information is updated, the target for the risk to be minimized and the closure date. Other information to include in the register are a description of the risk, the severity of risk, its impact, possible response action and the current status of risk.

Creating a Risk Register helps to be proactive in managing the programme/projects and handling any risks associated with them. Any issues that are likely to impact upon the success of the programme or project(s) and the timely completion should be categorized as risk. Strategies to handle this, such as a risk register, will help to prevent risks from becoming issues that may cause significant delays or even lead to the programme or project failing. On the next page a template for a risk register is provided. Risks registers should be kept for KUSP as a whole (by UDD) as well as for each of the UDG funded projects (by the manager of the urban boards/administration).

Table 2: Risk Management Register

S/No.	**Date raised**	**Description of the risk**	**Likelihood of occurrence medium/ high**	**Impact (scale 1-3)**	**Severity (likelihood x impact)**	**Mitigation strategy/ Strategies**	**Progress on Action**	**Status**
1.								
2.								
3.								

3.2 Risk Managing Process

The risk management process involves identification, assessment and response of the various risks pertinent to a given programme/ project.

3.2.1 Identification of Risk

The Municipality's ability to successfully implement strategy and achieve objectives will be affected by a number of potential events that, if they materialize, will have an impact on the

Municipality. Management will identify these potential events and assess whether they bring opportunities or pose risks to the Municipality. Events that have a negative impact are risks, which management must evaluate and address. Positive outcomes provide opportunities, which management feeds back into the process of developing strategy and objectives. In the context of the entire range of Municipality activities, management takes into account a variety of internal and external elements when assessing events that may result in risks and opportunities.

3.2.2 Risk Assessment

Through risk assessment, the Municipality can determine how much potential events will affect the accomplishment of its goals. Management evaluates events from the likelihood and impact perspectives and typically combines qualitative and quantitative techniques. The positive and negative effects of prospective occurrences will be evaluated across the Municipality, either individually or by category. Both an inherent and a residual basis are used to evaluate risks.

The Municipality will use a three by three matrix risk tool table to categorize risks and assign them to one of the nine cells based on qualitative assessments of their relative impact (high, medium, or low) and likelihood of occurrence (high, medium, or low).

__Table 3: Risk Matrix__

LIKELIHOOD OF OCCURRENCE

HIGH	LH	MH	HH
MEDIUM	LM	MM	HM
LOW	LL	MH	HL
	LOW	**MEDIUM**	**HIGH**

RELATIVE IMPACT

KEY

Green - Low: Rating shall be between **0.01 - 0.33**

Yellow – Moderate/Medium: Rating shall be between **0.34 - 0.67**

Red - High: Rating shall be between **0.68 - 1.0**

The following shall be the definition of the risk prioritization cells:

Low Impact-Low Probability (LI-LP)

Essentially negligible risks will be disregarded and removed from consideration that are both low impact and low possibility of occurring.

Low Impact-High Probability (LI-HP)

A situation that is very likely to happen and has a low chance of failing will not have a big impact on the Municipality and will be noted on the risk register.

Medium Impact-Medium Probability (MI-MP**)**

A situation that has a medium chance of happening and a low chance of failing will be noted on the risk register even though it won't have a big impact on the Municipality.

High Impact-Medium Probability (HI-MP)

An event that is very likely to occur and has a high probability of failure, will have significant consequences of failure for the Municipality and this risk will be recorded on the risk register.

High Impact-High Probability (HI-HP)

High impact and high likelihood of occurrence risks sometimes lead to the cancellation of Municipality programs or, if they are carried out nevertheless, to their failure. These threats will be noted in the risk log and escalated to the County Executive for review.

Low Impact-High Probability (LI-HP)

Low-impact, high-probability risks are those that are mostly brought on by uncertainty regarding a variety of factors that, while they may be modest risks alone, collectively they could represent a sizable danger.

High Impact-Low Probability (HI-LP)-

Due to their rarity, it is particularly challenging to assign probabilities to high-impact, low-probability events using historical data. Because there are no data, probabilities must be estimated subjectively.

3.2.3 Risk Response

After evaluating the pertinent risks, management will choose its course of action. Management will evaluate the influence on risk likelihood and impact, as well as cost and benefit, before deciding on a course of action, choosing one that will bring residual risk within targeted risk tolerance. The management will assess any potential opportunities, consider the total residual risk across the Municipality or across the portfolio, and decide if the overall residual risk is consistent with the Municipality's risk appetite. The reply will be in the following format:

i). **Avoidance** - If an activity is no longer desirable or judged too risky, it may be discontinued. Avoidance means management hasn't been able to come up with a solution that would lessen the risk to a degree of severity that is acceptable.

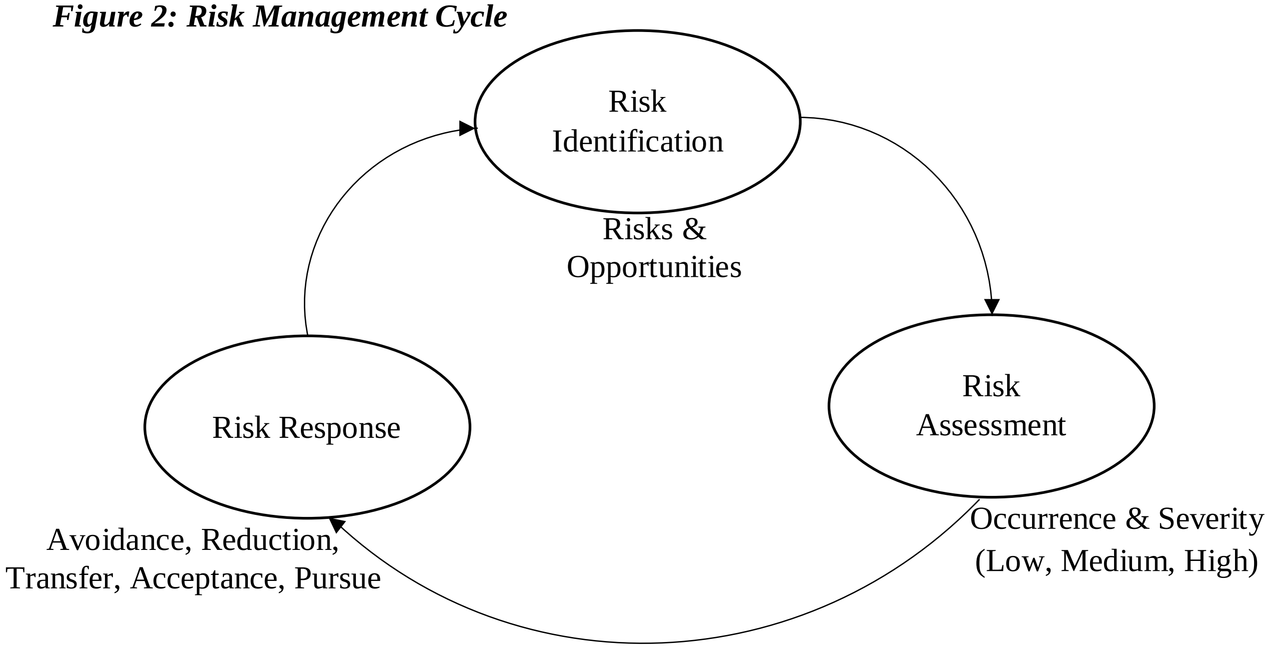
ii). **Reduction** - Mitigating measures are made to lessen the risk's likelihood and/or potential effects in order to make the risk more tolerable. This normally entails putting controls in place, and for material risks, it might also call for institutional or procedural modifications.

iii). **Sharing/Transferring -** By sharing risk components, mitigating action is made to lower the risk's likelihood and/or possible effects. The execution and implementation risks of outsourcing to third-party specialists or service providers, for example, may be shared (although not entirely the reputational repercussions). Similarly, insurance may lessen the financial impact of some risks.

iv). **Acceptance** - Without the necessity for additional mitigating measures, risk is accepted. This is true when a risk is acceptable, but it also occasionally holds true when a danger is unacceptable but there is no practical mitigation. The relevant Accounting Officer must approve the taking of risks that are outside of appetite, and the Municipal Manager is notified of material risks.

v). **Pursue –** To achieve strategic goals and/or enhance performance, an increased level of risk may be sought as long as it is within appetite or there is a clearly defined path to fulfill appetite. If the Accounting Officer decides to take on more risk in a situation where there is already a lack of appetite, the Municipal Manager shall be notified.

Figure 2: Risk Management Cycle



Source: MoE CPCT 2023

ANNEX I:
MUNICIPALITY OF EMBU RISK REGISTER TEMPLATE

REF. NO.	STRATEGIC OBJECTIVE	RISK	MITIGATING CONTROL	RISK OWNER	IMPACT	LIKELIHOOD	RISK RATING	LINKING DEPT
1.								
2.								
3.								
4.								
5.								
6.								
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