# TRAINING HEALTH RESEARCHERS INTO VOCATIONAL EXCELLENCE IN EAST AFRICA (THRIVE)



**RISK MANAGEMENT GUIDELINES** 

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## 1.0 INTRODUCTION

# 1.1 Background to Risk Management

Risk is the "effect of uncertainty on objective" (ISO 31000 2018)<sup>1</sup>. A risk may have one or more causes and, if it occurs, one or more impacts/effects may be negative or positive. This document focuses on events that could have a negative impact on achieving the objectives of the project.

Risk management is an ongoing process that continues through the life of a project. It includes processes for risk management planning, identification, analysis, monitoring and control. Many of these processes are updated throughout the project lifecycle as new risks can be identified at any time. On the other hand, any event that could have a positive impact should be exploited.

The identification of risk normally starts before the project is initiated, and the number of risks increase as the project matures through the lifecycle. When a risk is identified, it's first assessed to ascertain the probability of occurring, the degree of impact to the schedule, scope, cost, and quality, and then prioritized. Some risk events may impact only once while others may impact the project in multiple impact categories. The probability of occurrence, number of categories impacted and the degree (high, medium, low) to which they impact the project will be the basis for assigning the risk priority. All identifiable risks should be entered into a risk register, and documented as a risk statement.

As part of documenting a risk, two other important items need to be addressed. The first is identifying and documenting events that pose a risk to the outcome of a project. The second is mitigation steps that can be taken to lessen the probability of the event occurring. The third is a contingency plan, or a series of activities that should take place either prior to, or when the event occurs. Mitigation actions frequently have a cost.

Sometimes the cost of mitigating the risk can exceed the cost of assuming the risk and incurring the consequences. It is important to evaluate the probability and impact of each risk against the mitigation strategy cost before deciding to implement a contingency plan. Contingency plans implemented prior to the risk occurring are pre-emptive actions intended to reduce the impact or remove the risk in its entirety. Contingency plans implemented after a risk occurs can usually only lessen the impact.

All risks will be monitored on a scheduled basis by a risk management team which is the institutional Implementation Committee (IIC). The risks will be captured in the institutional risks/issues tracker and updated on an ongoing basis and reported on a quarterly basis.

<sup>&</sup>lt;sup>1</sup> www.ISO.org

#### 1.2 Context

#### 1.2.1 External Context

There are a number of events and requirements that exist outside THRiVE which impact on the performance of the consortium. These could be at international, national or institutional level where THRiVE operates.

#### 1.2.2 Internal Context

This relates to the culture, management processes and how different stakeholders participate in the implementation of THRiVE activities

#### 1.2.3 Risk management Context

The overall goal of our risk management activities is to minimise the impact from negative events and maximise the benefits from positive events. The risk management context will be examined taking into consideration all THRiVE's objectives. The THRiVE Program Director has overall responsibility for managing project risk. Project team members may be assigned specific areas of responsibility for reporting to the Program Director.

# 1.3 Purpose of the document

It's always important to consider risk as an event that could have either a positive or negative impact to a project. This risk management policy documents the processes, procedures and tools that will be used to manage and control those events that could have a negative impact on the THRiVE project. This policy will address the following areas:

- a) Risk management strategy
- b) Risk Treatment

# 2.0 RISK MANAGEMENT

**2.1 Risk Management Strategy** (risk identification, risk assessment, risk mitigation, risk tracking and reporting)

#### 2.1.1 Risk Identification

Risks can be identified from a number of different sources. Some may be quite obvious and will be identified prior to project kick off while others will be identified during the project lifecycle. Some risks will be inherent to the project itself, while others will be the result of external influences that are outside the control of the project team. A risk can be identified at any time during project implementation by any staff associated with the project. The risks might include: conflicting project or operational initiatives that place demands on project resources, unexpected study outcomes, delays among others.

Throughout all phases of the project, THRiVE will continuously reflect and brainstorm on

potential risks in the different areas of the program. All project staff will be responsible for identifying risks to the project. Committee heads, co-applicants and the leads of key functions like ICT, monitoring and evaluation and research administration and management will take lead in communicating risks in their respective units. Operational departments within THRiVE include but are not limited to: governance committees, IT, finance, public engagement, research administration, and monitoring & evaluation units.

The identified risks will be presented to the institutional implementation committee where they will be discussed and agree on a way forward.

#### 2.1.2 Risk Assessment

Risk assessment is the act of determining the probability that a risk will occur and the impact that event would have, should it occur. This is a "cause and effect" analysis. The "cause" is the event that might occur, while the "effect" is the potential impact to a project, should the event occur.

Risk assessment will be conducted along two criteria:

- i) The likelihood of occurrence and
- ii) The potential impact.

The likelihood of occurrence of a risk will be assessed according to the criteria summarised in Table 1.

Table 1: Criteria to assess likelihood of occurrence of the risk.

Likelihood	Description	Percentage	Score (out of 5)	
Almost Certain/Common	The risk is almost certain to occur in the current circumstances. The risk is already occurring, or is likely to occur	90%	5	
	more than once within the next 12 months.	30 /0		
Likely	More than an even chance of occurring. The risk could easily occur, and is likely to occur at least once within the next 12 months.	(70%)	4	
Possible	Could occur quite often. There is an above average chance that the risk will occur at least once in the next 3 years.	(55%)	3	
Unlikely	Small likelihood but could happen. The risk occurs infrequently and is unlikely to occur within the next 3 years.	20%	2	
Rare	Not expected to happen - Event would be a surprise. The risk is conceivable but is only likely to occur in extreme circumstances.	10%	1	

#### The potential impact

The potential impact of a risk will be assessed according to the criteria summarised

in Table 2.

Table 2: Criteria to assess potential impact of the risk.

Potential Impact	Description	Percentage	Score (out of 5)
Critical	Negative outcomes or missed opportunities- critical impact on achievement of objectives.	100%	5
Major	Negative outcomes or missed opportunities- substantial impact on achievement of objectives.	70%	4
Moderate	Negative outcomes or missed opportunities- medium impact on achievement of objectives.	50%	3
Minor	Negative outcomes or missed opportunities- low/small impact on achievement of objectives.	30%	2
Insignificant	Negative outcomes or missed opportunities- irrelevant impact on achievement of objectives.	10%	1

The impact assessment should put into consideration the cost, scope, schedule and quality as exemplified below:

**Cost** – This impact is usually estimated as a particular currency amount that has a direct impact to the project. However, cost is sometimes estimated and reported as simply additional resources, equipment, etc. This is true whenever these additional resources will not result in a direct financial impact to the project due to the fact the resources are loaned or volunteer, the equipment is currently idle and there is no cost of use, or there are other types of donations that won't impact the project budget. Regardless of whether there is a direct cost, the additional resources should be documented in the risk statement as part of the mitigation cost.

**Scope** – This relates to the degree to which the scale and range of activities might be affected by a given risk or threat. Whenever there is the potential that the final product(s) or the range of activities will not be completed as originally envisioned there is a scope impact. Scope impact could be measured as a reduction of the number of activities completed.

**Schedule** – It is very important to estimate the schedule impact of a risk event as this often results into the basis for elevating the other impact categories. Any delays in achievement of an activity/objective results into cost increase and possibly a reduction of scope or quality.

**Quality** – Quality is frequently overlooked as an impact category. Too often the preferred choice for mitigation of a risk is taking short cuts and making low cost replacements. This may inadvertently lead to a reduction in quality. If not addressed appropriately, it might compromise the attainment of the project objectives. The total risk exposure assessment is summarised in Table 3

Table 3: Summary of the overall risk exposure assessment

Overall Risk	Score	Description
Categorisation		

High	18 - 25	Unacceptable level of risk - High level of control intervention required /Urgent attention needed/stop
Medium	'9 - 17	Unacceptable level of risk, except under unique circumstances or conditions - Moderate level of control intervention required to achieve an acceptable level of residual risk/ Intervention in short term/cautious driving
Low	0 - 8	Mostly acceptable- low level of control intervention required. Manage risk within business unit.

## 2.1.3 Risk Mitigation

Risk mitigation is the process by which an organization introduces specific measures to minimize or eliminate unacceptable risks associated with its operations (*According to investor word's online financial glossary*)

Risk mitigation involves two steps:

- i) Identifying the various activities, or steps, to reduce the probability and/or impact of an adverse risk.
- ii) Creation of a Contingency Plan to deal with the risk should it occur.

Taking early steps to reduce the probability of an adverse risk occurring may be more effective and less costly than repairing the damage after a risk has occurred. The mitigation options may vary from risk to risk. However, some of these options may simply be too costly in time or money to consider.

All risks and their corresponding mitigation activities will be documented in the Risk Register, and reviewed on a regular basis. *A sample of this is provided as appendix A*.

This review could involve and incorporate:

- Identification of potential failure points for each risk mitigation solution.
- For each failure point, documenting the event that would raise a "flag" indicating that the event or factor has occurred or reached a critical condition.
- For each failure point, providing options for correcting the failure.

# 2.1.4 Tracking and Reporting

As project activities are conducted and completed, risk factors and events will be monitored to determine if in fact trigger events have occurred that would indicate the risk is now a reality.

Based on trigger events that have been documented during the risk analysis and mitigation processes, the IIC or secretariat will have the authority to enact contingency plans as deemed appropriate. Day to day risk mitigation activities will be enacted and directed by the project manager or equivalent.

#### 2.2 Risk Treatment

The possible response options to risk could include any of the following actions:

- i) **Risk Avoidance**: Avoiding the activity that causes the risk to arise/ eliminate the threat by eliminating the cause
- ii) Risk sharing: Transferring the risk to a 3rd Party, e.g. insurance/outsourcing
- iii) **Risk reduction:** Controlling the risk by either reducing the likelihood of occurrence or impact in the event of crystallisation
- iv) Risk acceptance/retention: Accepting to carry some element of (residue) risk

Once a response option has been implemented, the project team will undertake a revaluation to assess the impact of the option and document any residual risk exposure. A summary of this assessment is presented in Table 4.

Table 4: Assessing risk control effectiveness.

Effectiveness	Qualification	Rating		Residual Risk		
Factor	Criteria			Exposure		
Very Good	Risk exposure is effectively controlled and managed.	90%	1	Low	1	
Good	Majority of risk exposure is effectively controlled and managed.	80%	2		2	
Satisfactory	There is room for some improvement.	65%	3	Moderate	3	
Weak	Some of the risk exposure appears to be controlled, but there are major deficiencies.	40%	4	High	4	
Unsatisfactory	Control measures are ineffective.	20%	5		5	

## 3.0 RISK MANAGEMENT RESPONSIBILITIES

The responsibility for managing risk is shared amongst all the stakeholders of the project.

However, decision authority for selecting whether to proceed with mitigation strategies and implement contingency actions, especially those that have an associated cost or those that may involve contractual agreement modification rest with the Program Director. The responsible for handling the different aspects of risk management process are outlined below:

- i. Risk Identification: All project stakeholders
- ii. Risk Registry: Grants manager
- iii. Risk Assessment: Institutional implementation committees (IICs)
- iv. Risk Response Options Identification: Governance committees, Director, co-applicants
- v. Risk Response Approval: Steering committee, Director and co-applicants
- vi. Risk Contingency Planning: Governance committees, Director, coapplicants
- vii. Risk Response Management: Program Director and co-applicants
- viii. Risk Reporting: Committee heads, co-applicants and the leads of key functions

# 4.0 RISK CONTINGENCY PLANNING

Contingency planning is the act of preparing a plan, or a series of activities to be implemented should an adverse risk occur. Having a contingency plan in place forces the project team to think in advance so as to develop a course of action if a risk event takes place. The plan should apply in general terms to situations where the risk was unforeseen. The contingency plan may involve the following:

- Identify the contingency plan tasks (or steps) that can be performed to implement the mitigation strategy.
- Identify the necessary resources such as money, equipment and labour.
- Develop a contingency plan schedule. Since the date the plan will be implemented is unknown, this schedule will be in the format of day 1, day 2, day 3, etc., rather than containing specific start and end dates.
- Define emergency notification and escalation procedures, if appropriate.
- Develop contingency plan training materials, if appropriate.
- Review and update contingency plans if necessary.
- Publish the plan(s) and distribute the plan(s) to management and those directly involved in executing the plan(s).

Contingency may be reflected in the project budget, as a line item to cover unexpected expenses. The amount to budget for contingency may be limited to just the high probability risks. This is normally determined by estimating the cost if a risk occurs, and multiplying it by the probability. For example, assume a risk is estimated to result in an additional cost of \$50,000, and the probability of occurring is 80%. The amount that should be included in the budget for this one item is \$40,000.

Associated with a contingency plan, are start triggers and stop triggers. A start trigger is an event that would activate the contingency plan, while a stop trigger is the criteria to resume normal operations. Both should be identified in the Risk Register and can be embedded, example; the stop trigger can be included in the contingency plan field.

As part of contingency planning, THRiVE should prepare a business continuity plan whose operationalisation would ensure that to the extent possible business continues uninterrupted in case of an adverse event.

# **5.0 APPENDIX**

# Appendix A – Sample risk register template

Risk no.	Departments	Areas of Risk	Description	Inherent Risk Score		Total Risk	Controls, Policies,	Inherent Risk Score		Total Risk Exposure
				Likelihood	Impact	Exposure (Pre Control)	Procedures in place to address risk	Likelihood	Impact	(Post Control)
1										
2										
3										

# **6.0 ACKNOWLEDGEMENT**

In developing this policy document, reference was made to the International Centre of Insect Physiology and Ecology (icipe) Risk Management document

Chairman, THRIVE Steering Committee