MRV Guidance Document

Health Sector

Initiative for Climate Action Transparency - ICAT

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Executive Summary

Climate change is a crucial modern challenge that significantly impacts human health and livelihoods. While quantifying these effects can be complex, it is well-established that climate change exacerbates various health issues. The World Health Organization (WHO) and the Intergovernmental Panel on Climate Change (IPCC) highlight a range of health-related concerns sensitive to climate variability, including vector-borne diseases (e.g., malaria), waterborne illnesses (e.g., cholera), heat-related conditions, and mental health issues. Additionally, climate-change-induced disasters have increasingly damaged health facilities, with an average of 412 reported instances per year from 2005 to 2019.

To address these challenges, it is vital for the health sector to enhance its adaptive capacity to climate variability. This becomes particularly pressing as the frequency and intensity of extreme weather events are expected to rise, indicating a potential increase in health risks without proactive measures.

Governments, including the Kingdom of Eswatini, have recognized the urgency of climate action. Eswatini ratified the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol, and has contributed to global efforts through its commitments under the Paris Agreement, which emphasizes national self-determined contributions (NDCs) towards climate action. The Enhanced Transparency Framework (ETF) introduced by the Paris Agreement aims to establish clear reporting mechanisms for countries to track and share their climate initiatives.

The ICAT Phase II Project aims to establish a Measurement, Reporting and Verification (MRV) Implementation Framework specifically for the health sector in Eswatini. This framework will assist in tracking adaptation actions, providing essential data for the Adaptation Biennial Transparency Report (A-BTR), and strengthening the health sector's capacity to report effectively.

This guidance document is designed for practitioners and technical experts responsible for collecting climate-related data within the health sector, as well as those from other sectors. It outlines clear instructions for using the MRV templates, aimed at aligning health sector activities with national adaptation goals.

The successful implementation of these guidelines requires active engagement from all relevant stakeholders. By establishing effective monitoring and reporting mechanisms, Eswatini can significantly enhance its resilience to climate change and ensure the health and well-being of its population.

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Abbreviations

ADCOM	Adaptation Communication
BTR	Biannual Transparency Report
BUR	Biannual Update Report
CBIT	Capacity-building Initiative for Transparency
CMIS	Client Management Information System
CSO	Central Statistics Office
ETF	Enhanced Transparency Framework
GHG	Greenhouse Gas
GST	Global Stocktake
HMIS	Health Management Information System
ICAT	Initiative for Climate Action Transparency
IDNS	Immediate Disease Notification System
INDC	Intended Nationally Determined Contributions
IPCC	Intergovernmental Panel on Climate Change
M&E	Monitoring and Evaluation
MEPD	Ministry of Economic Planning and Development
MOH	Ministry of Health
MPGs	Modalities, Procedures, and Guidelines
MRV	Measurement, Reporting and Verification
MTEA	Ministry of Tourism and Environmental Affairs
NC	National Communication
NDC	Nationally Determined Contributions
NDMA	National Disaster Management Agency
QA	Quality Assurance
QC	Quality Control
REPS	Royal Eswatini Police Services
RHMT	Regional Health Management Team
SMT	Senior Management Team
UNFCCC	United Nations Framework Convention on Climate Change
VAC	Vulnerability Assessment Committee
WASH	Water, Sanitation and Hygiene

1. INTRODUCTION

Climate change is undoubtedly one of the biggest challenges of modern times, impacting human health and livelihoods in a significant way. Although the impacts of climate change on human health may be difficult to quantify, it is generally accepted that climate change drastically affects human health. Therefore, the World Health Organisation (WHO) and Intergovernmental Panel on Climate Change (IPCC) fifth assessment report (IPCC AR5) identified some diseases and other aspects of poor health that are sensitive to weather and climate change. These include vector-borne diseases (such as malaria), water and food-related diseases (such as cholera), direct injuries or death, heat related and poor air quality related illnesses and mental health issues (**Figure 1**). Furthermore, climate change does not only impact human health, but also has a huge impact on health facilities and health systems. Between 2005 and 2019, an average of 412 health facilities per year were reported to have been damaged or destroyed by climate-related disasters and these impacts are increasing. In order for the health sector to reduce the risks, impacts and vulnerabilities associated with climate change, it is imperative that this sector also develops adaptive capacity to climate variability and change. This is especially critical because the frequency and intensity of some types of extreme weather events are expected to increase over coming decades as a consequence of climate change, suggesting that the associated health impacts could increase without additional preventive actions.

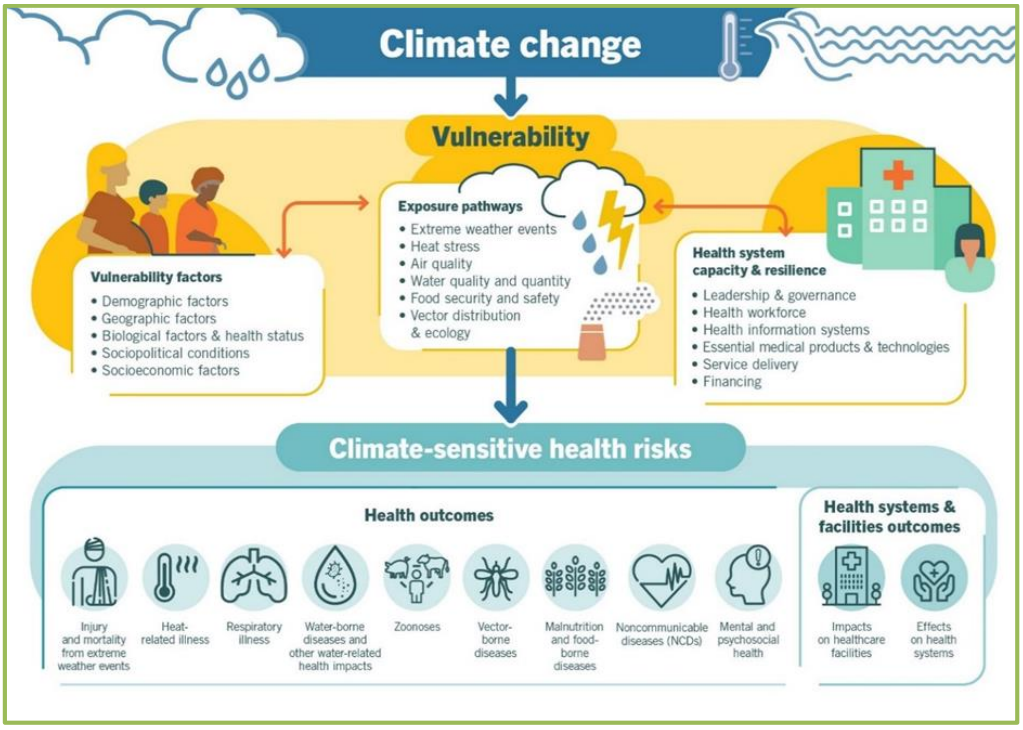


Figure 1: Impact of Climate Change on the health sector[1]

It is thus imperative for governments to take decisive action in order to reduce the impacts of climate change on human health. Therefore, the Government of the Kingdom of Eswatini ratified the United

[1] Climate-sensitive health risks. WHO factsheet. https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health (Accessed on 15 November 2024)

Nations Framework Convention on Climate Change (UNFCCC) in 1996 and the Kyoto Protocol in 2002 to contribute to the global fight against climate change. In 2015, the Paris Agreement established a series of long-term goals across climate change mitigation, adaptation, and the provision of support. Under the Paris Agreement, each country's contribution towards achieving the Paris Agreement's goals is self-determined. This means that, countries decide how, and to what extent, they can reduce their national GHG emissions, implement adaptation measures, and provide support to achieve those objectives.[2] Additionally, the Paris Agreement introduced a new reporting framework, the Enhanced Transparency Framework (ETF), which established the Biennial Transparency Report (BTR). The BTR is intended to facilitate country reporting on mitigation and adaptation activities, and financial, technical, and capacity-building support provided and received. The main addition in the BTR is the need to report on adaptation measures. Eswatini also made several key mitigation and adaptation-related commitments in its Intended Nationally Determined Contributions (INDC) developed in 2015 under the Paris agreement. The INDC supported the achievement of the country's developmental objectives of sustainable development, poverty eradication and enhanced adaptive capacity. In 2021, Eswatini submitted her revised and more ambitious NDC.

The ICAT Phase II Project aims among other things, to develop a Measurement, Reporting and Verification (MRV) Implementation Framework (including data collection templates, guidance documents, roles and responsibilities) to track adaptation actions in the health sector. These elements are essential to provide information necessary to compile the health sector components of the Adaptation Biennial Transparency Report (A-BTR) as well as build capacity for reporting by developing health sector institutional arrangements.

1.1. Who is the guidance intended for?

This document is intended for practitioners and technical experts who have an oversight or are responsible for collecting data in the health sector that is related to climate change. It is also intended for other experts in other sectors who collect data that can be used to report on the adaptation of the country to the effects of climate change and extreme weather events on human health.

1.2. Purpose of the guidance document

The MRV Guidance Document is to be read together with the MRV Implementation Framework[3] and the Adaptation Reporting Templates[4] for the Health Sector. The Guidance document aims to provide information about the MRV Implementation Framework in the health sector of the Kingdom of Eswatini as well as provide guidance on how to collect data to track the implementation of NDC targets through established indicators. The collected data must also undergo quality control/assurance (QC/QA) before it is transmitted to the Ministry of Tourism and Environmental Affairs (MTEA), Climate Change Unit to compile national climate change reports as periodically required by the UNFCC.

[2] Dale, T., Christiansen, L., & Neufeldt, H. (2020). Reporting adaptation through the biennial transparency report: A practical explanation of the guidance. Copenhagen, Denmark: UNEP DTU Partnership, and Initiative for Climate Action Transparency (ICAT).

[3] Ndlovu, T. and Sibandze G. (2024). MRV Implementation Framework, Health Sector. Measurement, Reporting, and Verification (MRV) for Adaptation in preparation for Biennial Transparency Report (BTR). ICAT Phase II Project, Ministry of Tourism and Environmental Affairs.

[4] Sibandze G. and Ndlovu, T. (2024). Adaptation Reporting Templates for the Health Sector. Measurement, Reporting, and Verification (MRV) for Adaptation in preparation for Biennial Transparency Report (BTR). ICAT Phase II Project, Ministry of Tourism and Environmental Affairs.

2. Reporting obligations to the UNFCCC

2.1. The Paris Agreement

In 2015, the Paris Agreement established a series of long-term goals across climate change mitigation, adaptation, and the provision of support. The Agreement set long-term goals to guide all nations to:

- substantially reduce global greenhouse gas emissions to hold global temperature increase to well below 2°C above pre-industrial levels and pursue efforts to limit it to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;
- periodically assess the collective progress towards achieving the purpose of this agreement and its long-term goals;
- provide financing to developing countries to mitigate climate change, strengthen resilience and enhance abilities to adapt to climate impacts.[5]

The Agreement is a legally binding international treaty and today, 195 Parties (194 States plus the European Union) have joined the Paris Agreement. It works on a five-year cycle of increasingly ambitious climate action by countries. Each country's contribution towards achieving the Paris Agreement's goals is self-determined. This means that, countries decide how, and to what extent, they can reduce their national GHG emissions, implement adaptation measures, and provide support to achieve those objectives.[6] Since 2020, countries have been submitting their national climate action plans, known as NDCs. Each successive NDC is meant to reflect an increasingly higher degree of ambition compared to the previous version[7].

The Agreement provides a pathway for developed nations to assist developing nations in their climate mitigation and adaptation efforts while creating a framework for the transparent monitoring and reporting of countries' climate goals. Additionally, the Paris Agreement introduced a new reporting framework, the ETF, which established the BTR. The BTR is intended to facilitate country reporting on mitigation and adaptation activities, and financial, technical, and capacity-building support provided and received. This reporting framework will come into force in 2024 and will replace the "Biennial Update Report" (BUR) which was set out under the Paris Agreement.[8] The main addition in the BTR, relative to the BUR, is the need to report on adaptation measures.

2.1.1. Enhanced Transparency Framework (ETF)

The ETF is a universal, robust framework for all Parties to report on progress and support received, and for this information to undergo technical expert review.[9] It supersedes a portion of the previous

[5] UN. The Paris Agreement. https://www.un.org/en/climatechange/paris-agreement

[6] Dale, T., Christiansen, L., & Neufeldt, H. (2020). Reporting adaptation through the biennial transparency report: A practical explanation of the guidance. Copenhagen, Denmark: UNEP DTU Partnership, and Initiative for Climate Action Transparency (ICAT).

[7] UNFCCC. The Paris Agreement. https://unfccc.int/process-and-meetings/the-paris-agreement

[8] https://ndcpartnership.org/toolbox/biennial-transparency-report-btr-guidance-and-roadmap-tool

[9] Reporting and Review | UNFCCC

reporting requirements of the UNFCCC and provides a more comprehensive reporting and review system for mitigation, adaptation, and means of implementation and support. Paragraph 1 of Article 13 reads:

> *"In order to build mutual trust and confidence and to promote effective implementation, an enhanced transparency framework for action and support, with built-in flexibility which takes into account Parties' different capacities and builds upon collective experience is hereby established".*[10]

Following the adoption of the Paris Agreement, Parties negotiated and adopted Decision 18/CMA.1 in 2018. This decision contains the modalities, procedures, and guidelines (MPGs) for the ETF, including the mandatory and optional elements the Parties would report in their BTRs. In 2021, Parties adopted Decision 5/CMA.3, which contains the outline for the BTR. The ETF was designed to be non-intrusive, non-punitive, and flexible, while facilitating improved reporting and transparency over time.

The ETF will help to provide clarity on support provided and received by relevant individual Parties in the context of actions to achieve the NDCs (Article 4), adaptation actions (Article 7), financial support (Article 9), technology development and transfer (Article 10), and capacity-building (Article 11). It will also support the provision of a full overview of aggregate financial support provided to inform the "global stocktake" (Article 14).

2.1.2. Biennial Transparency Report (BTR)

The BTR is a report prepared and submitted by Parties to the Paris Agreement that captures information on their progress in implementing the different aspects of the Agreement. The different aspects are covered in the five separate chapters of the BTR, some of which are mandatory and some of which are optional. **Table 1** compares the different elements or type of information to be included in the different instruments submitted to the UNFCC.

The BTR is the reporting vehicle for the ETF, complementing other communications and reporting vehicles under the UNFCCC and the Paris Agreement. These include the National Communications (NCs) and the ADCOM. A common reporting format, like the BTR, allows comparability, consistency, and completeness of information provided while avoiding duplication of work and undue burden. All Parties to the Paris Agreement are required to submit a BTR to report on their national climate information and their progress in climate action. A chapter on climate change impacts and adaptation in BTRs is optional.

BTRs help facilitate mutual trust and confidence between countries and allow Parties and non-Party stakeholders to understand the state of climate action in each country. Regular and quality reporting of each country's climate action and the progress they are making toward their commitments help demonstrate that countries are not tackling the climate crisis on their own. It also allows countries to exchange information and share lessons learned from their domestic climate actions.[11] Information

[10] https://napglobalnetwork.org/2023/09/faq-adaptation-in-biennial-transparency-reports/ (Accessed 11/11/2023)

[11] https://unfccc.int/process-and-meetings/the-paris-agreement (Accessed 09 September 2024)

from the BTRs also feeds the Global Stocktake (GST) process which assesses the overall collective progress made in achieving the long-term goals of the Paris Agreement.

Table 1: Reporting requirements for adaptation information under UNFCCC arrangements[12]

Type of information	BTR	ADCOM	NAPs	NC of A1 Parties	NC of Non A1 Parties
National circumstances, institutions, legal framework	X	X	X		X
Impacts, risks, vulnerabilities	X	X	X	X	X
Priorities and barriers related to adaptation	X	X	X		
Strategies, policies, plans, goals, steps to integrate adaptation into other policies	X	X	X	X	X
Support needed/support received	X	X	X		
Progress in implementation of adaptation	X	X	X	X	X
Monitoring and evaluation	X	X	X	X	X
Information related to averting, minimizing and addressing loss and damage associated with climate change impacts	X				
Cooperation, good practices, experiences, lessons learned	X	X	X		
Adaptation-related economic diversification/ mitigation co-benefits of adaptation	X	X			
Contributions to other international frameworks		X	X		
Gender perspective and/or traditional, indigenous and local knowledge	X	X	X		

2.2. Eswatini's compliance with reporting obligations

As part of the obligations under the UNFCCC, Eswatini made a number of key adaptation related commitments in her INDC developed in 2015 for presentation at the 21st UNFCCC Conference of Parties (COP21) in Paris, France, December 2015. This was the first commitment made by the country to climate action. Later in 2021, the updated NDC was submitted in which the country identified some key sectors (also identified in the INDC that need to be targeted to form the adaptation contribution of the country to the UNFCCC. These sectors are Biodiversity and Ecosystems, Water, Agriculture and Health.

Prior the NDC, Eswatini submitted her First National Communication (NC1) in May 2002, the Second National Communication (NC2) in March 2012 and the Third National Communication (NC3) in October 2016. The country has also recently compiled its Fourth National Communication (NC4) (Figure 2).

[12] https://unfccc.int/sites/default/files/resource/CGE%20Training%20materials%20A-BTR.pdf (Accessed 27 November 2024)

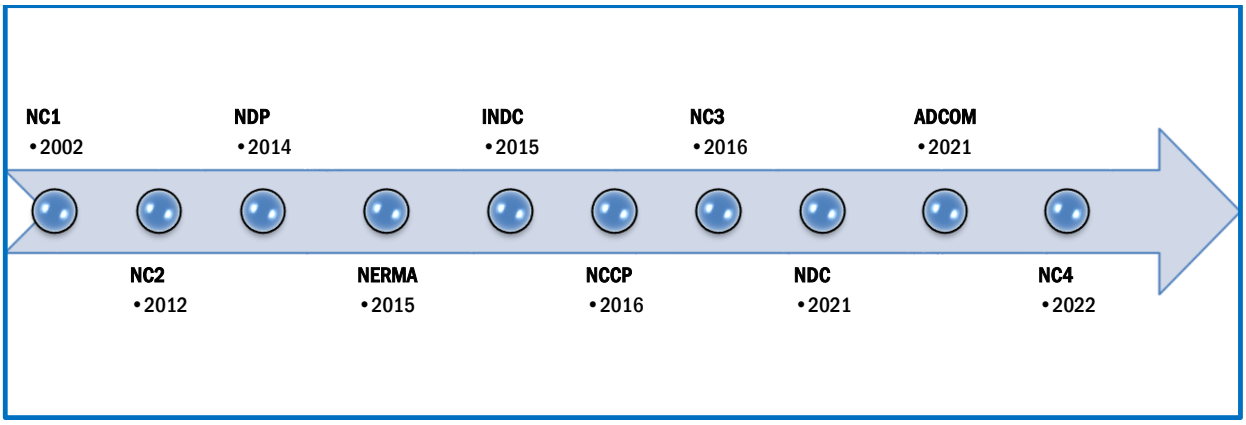


Figure 2: Timeline of major climate change instruments submitted to the UNFCC

These instruments are necessary to gauge the implementation of national policies and strategies related to climate change. The proposed actions in the NC1 to NC3 resulted in the development of a number of new policy documents and instruments, such as the revised National Development Plan (NDP) (2014), the National Emergency Response Mitigation and Adaptation Plan (NERMA (2015) and the National Climate Change Policy (NCCP) (2016).

Although health adaptation has been prioritised in the country's NDC, the health sector has historically lagged behind in climate change adaptation reporting due to many factors such as the lack of institutional arrangements for data sharing, inadequate infrastructure and technology to capture the relevant data, lack of capacity among health professionals in terms of the nexus between climate change and health and the shortage of resources, in particular finance to support adaptation activities. In this current work, an MRV framework and reporting templates have been developed to facilitate tracking adaptation in the health sector and monitoring the gaps and areas that may need more focus to inform future ambition.

3. Overview of the health sector MRV

The Eswatini Health Sector MRV implementation framework builds on the existing structures and proposes institutional arrangements, roles and responsibilities and reporting templates that will enhance the collection of the relevant data for measurement, reporting and verification. The framework was developed with stakeholder participation and is meant to be operationalised initially without putting too much additional strain on the current workforce.

3.1. Institutional arrangements in the Eswatini health sector

Based on the assessment of the health sector and available governance, expertise, data flows and systems available, the proposed institutional arrangement is shown in **Figure 3.** This proposed structure is meant to facilitate climate reporting for both the health and WASH sectors (for actions under the MOH). The arrangement proposes the establishment of a Climate Change Task Team for the health sector that will coordinate data collection and further transmit it to the Department of Meteorology through the Director of Health Services.

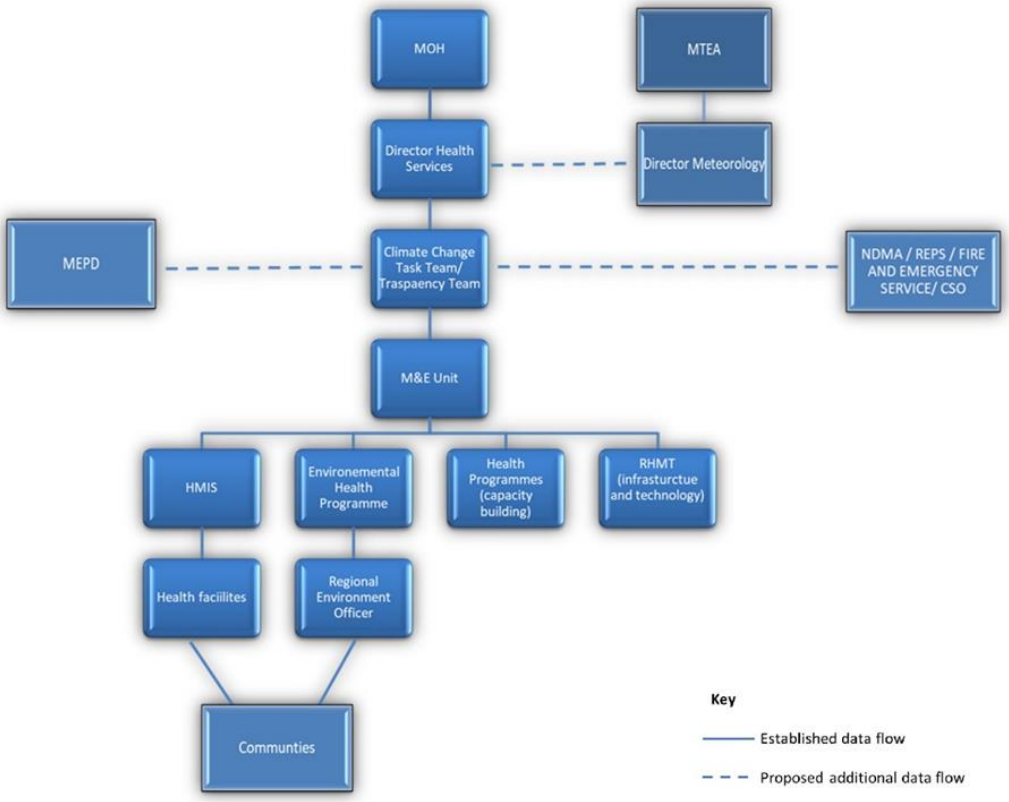


Figure 3: Proposed data flow arrangement for the health sector

3.1.1. Reporting roles and responsibilities

Based on the proposed data flow structure, the roles and responsibilities of the all the stakeholders can be found in the MRV Implementation Framework.[13]

3.2. What are we tracking and how?

The approach used in tracking adaptation action is the top-down approach where the MRV tracks implementation of the NDC targets. Reporting templates have been designed to collect data in the health sector and other departments that have relevant information to track adaptation of the country to the impacts of climate change on health. The reporting templates collect data periodically and this is transmitted to the MTEA where the data will be used to compile the adaptation component of the health sector in the reporting instruments as well as planning instruments to the UNFCC.

The key adaptation actions for the health sector elaborated in the NDC and ADCOM include:

i. Mainstreaming climate change into the national health policy and other strategic documents;
ii. Strengthening climate-informed disease control programs and surveillance systems using climate services to target vector control;
iii. Improving and integrating the health management information system with other systems from relevant sectors to achieve a centralized Monitoring Review and Verification (MRV) system;
iv. Strengthening the preparedness and resilience of the health sector to respond to climate related emergencies and illnesses through preparedness plans and programs;
v. Strengthening capacity of healthcare workers on the adverse impacts of climate change;
vi. Educating and informing the public of the measures needed to protect health from the adverse impacts of climate change;
vii. Adopting sustainable climate smart technologies to enhance the resilience of health care facilities to the adverse effects of climate change;
viii. Establishing a multi-hazard early warning system to trigger prompt public health intervention when certain variables exceed a defined threshold;
ix. Financing health actions to address inequities and climate related vulnerabilities;
x. Promoting capacity building through research and development, education and awareness, and training in climate change related issues;
xi. Mainstreaming gender responsive climate policies and emphasize special efforts to support vulnerable groups (women, youth, and children) in climate change adaptation efforts within all sectors of the economy;
xii. Secure climate proof WASH infrastructure to increase community resilience and boost adaptative capacity; and,

[13] Ndlovu, T. and Sibandze G. (2024). MRV Implementation Framework, Health Sector. Measurement, Reporting, and Verification (MRV) for Adaptation in preparation for Biennial Transparency Report (BTR). ICAT Phase II Project, Ministry of Tourism and Environmental Affairs..

xiii. Using co-benefits from mitigation measures e.g., clean technologies in waste and wastewater management, energy, among other co-benefits.

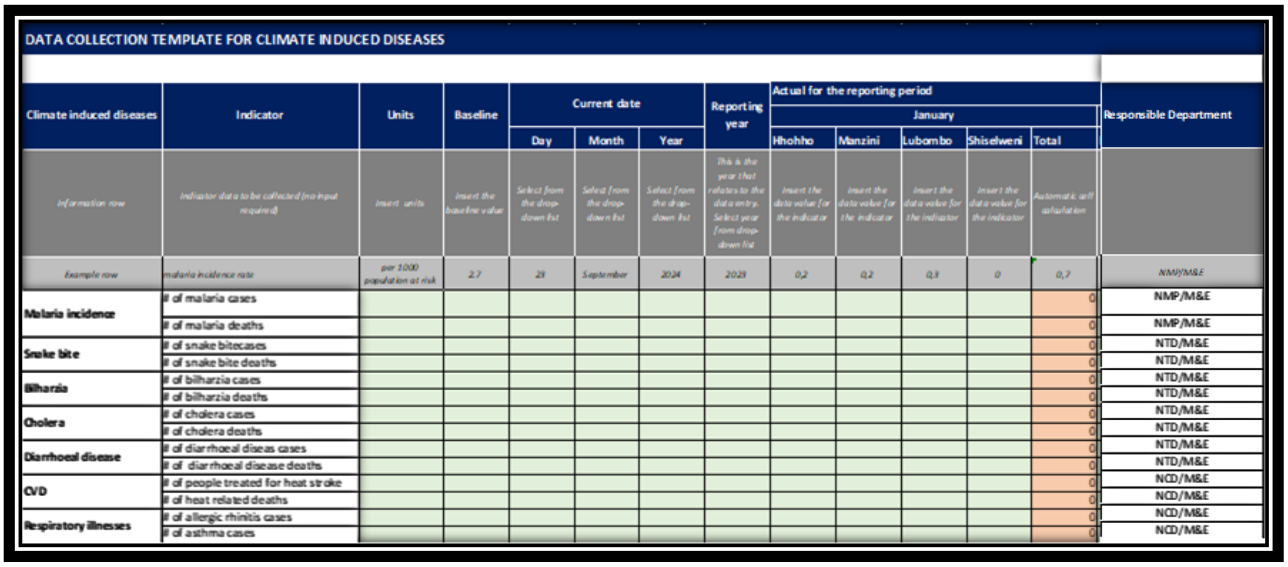
4. Using the reporting templates

4.1. Introduction

The Adaptation Reporting Templates for the Health Sector provide a detailed guidance on what data is required and who will need to provide the data. This guidance is meant to provide an overview of the templates but also give more detail on what data is required, where it can be sourced, as well as which department is responsible to fill the adaptation measure being monitored. The reporting templates are meant to track the implementation of the NDC targets the country sets for itself. The templates need to be reviewed when the ambition is increased. However, it is recommended that the initial targets are kept as a record of the country's achievements in climate change adaptation. It is important to note that some of the data collected may not, in the first instance, be used to track adaptation, however, it can be useful to build a climate change case for the health sector to strengthen its resilience or source for funding through climate financing mechanisms for adaptation purposes. The reporting templates are segregated into different sheets in an excel file. Each excel sheet collects specific data that supports one or more adaptation targets. Some of the cells are prefilled whilst others need to be filled by the responsible personnel. Some sections have a drop-down menu to select and others do not need filling as values are automatically filled.

4.1.1. Climate induced diseases

Although the data being collected for climate induced diseases cannot be immediately used to report on adaptation implementation progress, the data is important to determine vulnerability of the population to climate change (**Figure 4**). When filling the data, each responsible department must fill in monthly disaggregated data. This can be overlaid with climate data to establish an interaction between climatic events or extreme weather events and disease incidence. At the initial stages, the data can be disaggregated into regions and this can be overlaid with climate data in those regions. It is, however, advised that for regions where there is an increased incidence during a certain climatic event, there be a further disaggregation of the data into the specific localities to gain an in-depth understanding of the linkages between the reported incidence and the prevailing climatic conditions in that specific location. Further disaggregation can be by sex and age of the affected. The data needed here is obtainable from Client Management Information System (CMIS), Immediate Disease Notification System (IDNS) or Health Management Information System (HIMS).



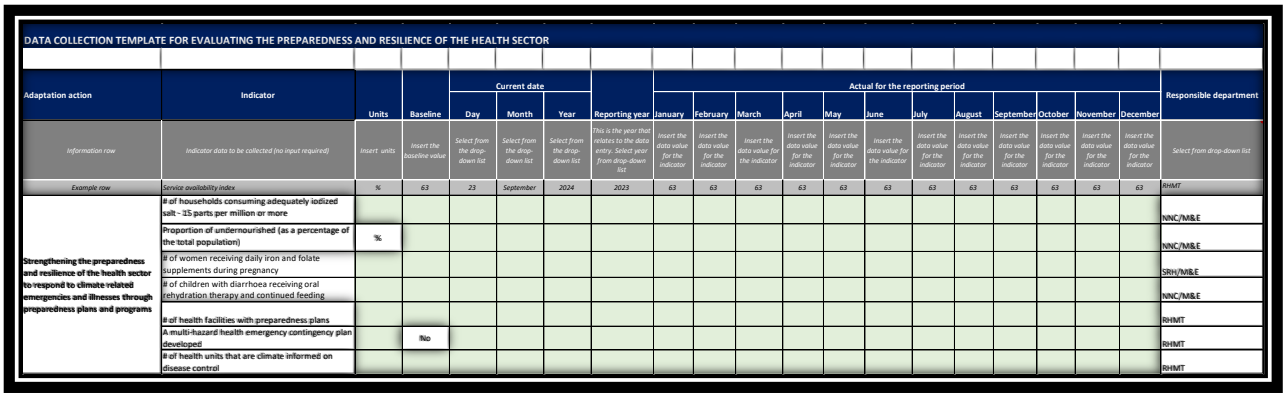
DATA COLLECTION TEMPLATE FOR CLIMATE INDUCED DISEASES

Climate induced diseases	Indicator	Units	Baseline	Current date			Reporting year	Actual for the reporting period					Responsible Department
								January					
				Day	Month	Year		Hhohho	Manzini	Lubombo	Shiselweni	Total	
Information row	*Indicator data to be collected (no input required)*	*Insert units*	*Insert the baseline value*	*Select from the drop-down list*	*Select from the drop-down list*	*Select from the drop-down list*	*This is the year that relates to the data entry. Select year from drop-down list*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Automatic self calculation*	
Example row	*malaria incidence rate*	*per 1000 population at risk*	*2.7*	*28*	*September*	*2024*	*2023*	*0,2*	*0,2*	*0,3*	*0*	*0,7*	*NMP/M&E*
Malaria incidence	# of malaria cases											0	NMP/M&E
	# of malaria deaths											0	NMP/M&E
Snake bite	# of snake bitecases											0	NTD/M&E
	# of snake bite deaths											0	NTD/M&E
Bilharzia	# of bilharzia cases											0	NTD/M&E
	# of bilharzia deaths											0	NTD/M&E
Cholera	# of cholera cases											0	NTD/M&E
	# of cholera deaths											0	NTD/M&E
Diarrhoeal disease	# of diarrhoeal diseas cases											0	NTD/M&E
	# of diarrhoeal disease deaths											0	NTD/M&E
CVD	# of people treated for heat stroke											0	NCD/M&E
	# of heat related deaths											0	NCD/M&E
Respiratory illnesses	# of allergic rhinitis cases											0	NCD/M&E
	# of asthma cases											0	NCD/M&E

Figure 4: A section of the reporting template on climate induced diseases

4.1.2. Preparedness and resilience of the health sector

Adverse weather events resulting from climate change oftentimes present scenarios that put pressure on the health system. Therefore, strengthening the preparedness and resilience of the health sector to respond to climate related emergencies and illnesses through preparedness plans and programs is key in building resilience. Some of the data required (**Figure 5**) in this section may be obtained from national surveys such as those undertaken by the Vulnerability Assessment Committee (VAC).



DATA COLLECTION TEMPLATE FOR EVALUATING THE PREPAREDNESS AND RESILIENCE OF THE HEALTH SECTOR

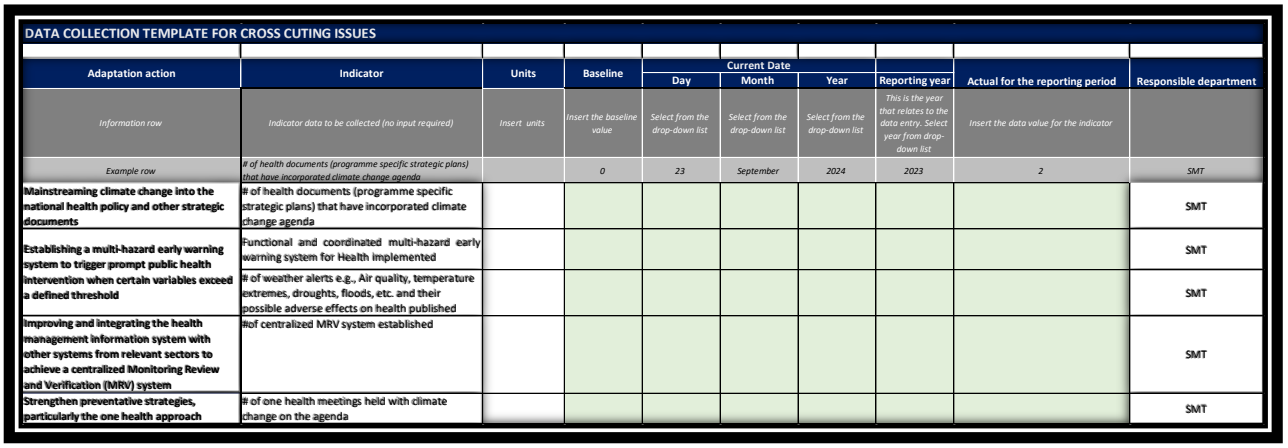
Adaptation action	Indicator	Units	Baseline	Current date			Reporting year	Actual for the reporting period												Responsible department
				Day	Month	Year		January	February	March	April	May	June	July	August	September	October	November	December	
Information row	*Indicator data to be collected (no input required)*	*Insert units*	*Insert the baseline value*	*Select from the drop-down list*	*Select from the drop-down list*	*Select from the drop-down list*	*This is the year that relates to the data entry. Select year from drop-down list*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Select from drop-down list*
Example row	*Service availability index*	*%*	*63*	*23*	*September*	*2024*	*2023*	*63*	*63*	*63*	*63*	*63*	*63*	*63*	*63*	*63*	*63*	*63*	*63*	*RHMT*
Strengthening the preparedness and resilience of the health sector to respond to climate related emergencies and illnesses through preparedness plans and programs	# of households consuming adequately iodized salt - 15 parts per million or more																			NNC/M&E
	Proportion of undernourished (as a percentage of the total population)	%																		NNC/M&E
	# of women receiving daily iron and folate supplements during pregnancy																			SRH/M&E
	# of children with diarrhoea receiving oral rehydration therapy and continued feeding																			NNC/M&E
	# of health facilities with preparedness plans																			RHMT
	A multi-hazard health emergency contingency plan developed		No																	RHMT
	# of health units that are climate informed on disease control																			RHMT

Figure 5: A section of the reporting template on preparedness and resilience of the health sector

4.1.3. Cross-cutting issues

Cross-cutting issues include a variety of NDC targets that are strategic and high level in nature. The data here (Figure 6) is the responsibility of the senior management team (SMT). It is important that the climate change agenda in the health sector is driven from the front by the management team. Issues such as mainstreaming climate change into national health policy and strategic documents as well as improving and integrating the HMIS into the national multi-hazard system can only be

effectively driven at a strategic level (**Figure 6**).



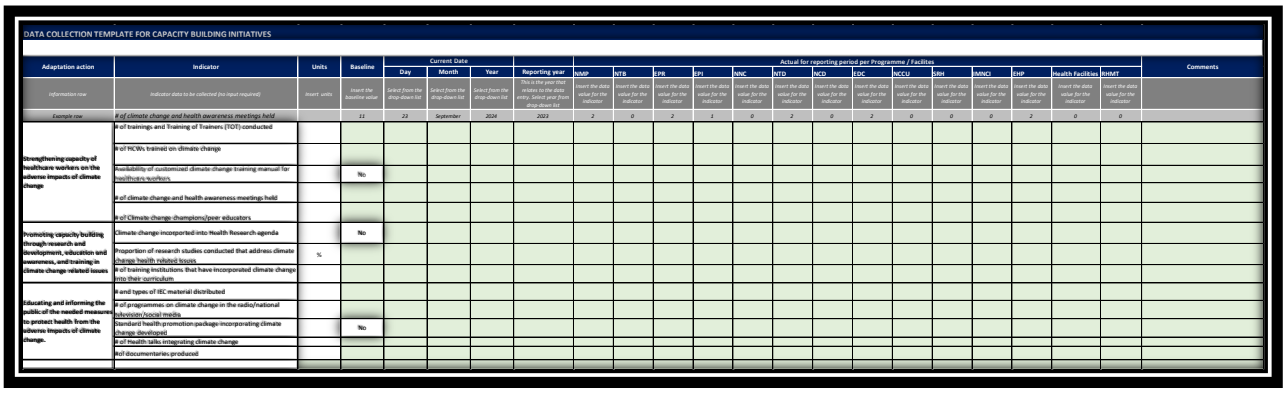
DATA COLLECTION TEMPLATE FOR CROSS CUTING ISSUES

Adaptation action	Indicator	Units	Baseline	Current Date			Reporting year	Actual for the reporting period	Responsible department
				Day	Month	Year			
Information row	*Indicator data to be collected (no input required)*	*Insert units*	*Insert the baseline value*	*Select from the drop-down list*	*Select from the drop-down list*	*Select from the drop-down list*	*This is the year that relates to the data entry. Select year from drop-down list*	*Insert the data value for the indicator*	
Example row	*# of health documents (programme specific strategic plans) that have incorporated climate change agenda*		*0*	*23*	*September*	*2024*	*2023*	*2*	*SMT*
Mainstreaming climate change into the national health policy and other strategic documents	# of health documents (programme specific strategic plans) that have incorporated climate change agenda								SMT
Establishing a multi-hazard early warning system to trigger prompt public health intervention when certain variables exceed a defined threshold	Functional and coordinated multi-hazard early warning system for Health implemented								SMT
	# of weather alerts e.g., Air quality, temperature extremes, droughts, floods, etc. and their possible adverse effects on health published								SMT
Improving and integrating the health management information system with other systems from relevant sectors to achieve a centralized Monitoring Review and Verification (MRV) system	#of centralized MRV system established								SMT
Strengthen preventative strategies, particularly the one health approach	# of one health meetings held with climate change on the agenda								SMT

Figure 6: A section of the reporting template cross-cutting issues

4.1.4. Capacity building

Capacity building of healthcare workers on climate change is essential to build resilience in the health sector. Capacity building monitored should include both workshops and longer trainings or pre-service training. This can be monitored through attendance registers for trainings where climate change is on the agenda (for workshops/seminars/webinars). Mainstreaming the climate change agenda into the different trainings periodically conducted by the different programmes will ensure that the sector is well capacitated on climate change and health. The different departments must therefore report on the number of individuals trained as well as IEC material developed and distributed to the public (**Figure 7**).



DATA COLLECTION TEMPLATE FOR CAPACITY BUILDING INITIATIVES

Adaptation action	Indicator	Units	Baseline	Current Date			Reporting year	Actual for reporting period per Programme / Facilities														Comments
				Day	Month	Year		NMP	NTB	CPB	EPI	NNC	NTD	NCD	EDC	NCCU	SRH	NVNCI	CHP	Health Facilities	RNHT	
Information row	*Indicator data to be collected (no input required)*	*Insert units*	*Insert the baseline value*	*Select from the drop-down list*	*Select from the drop-down list*	*Select from the drop-down list*	*This is the year that relates to the data entry. Select year from drop-down list*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	*Insert the data value for the indicator*	
Example row	*# of climate change and health awareness meetings held*		*11*	*23*	*September*	*2024*	*2023*	*2*	*0*	*2*	*1*	*0*	*2*	*0*	*2*	*0*	*0*	*0*	*2*	*0*	*0*	
Strengthening capacity of healthcare workers on the adverse impacts of climate change	# of trainings and Training of Trainers (TOT) conducted																					
	# of HCWs trained on climate change																					
	Availability of customized climate change training manual for healthcare workers		No																			
	# of climate change and health awareness meetings held																					
	# of Climate change champions/peer educators																					
Promoting capacity building through research and development, education and awareness, and training in climate change related issues	Climate change incorported into Health Research agenda		No																			
	Proportion of research studies conducted that address climate change health related issues	%																				
	# of training institutions that have incorporated climate change into their curriculum																					
Educating and informing the public of the needed measures to protect health from the adverse impacts of climate change.	# and types of IEC material distributed																					
	# of programmes on climate change in the radio/national television/social media																					
	Standard health promotion package incorporating climate change developed		No																			
	# of Health talks integrating climate change																					
	#of documentaries produced																					

Figure 7: A section of the reporting template on capacity building

4.1.5. Technology and infrastructure

Adopting sustainable climate smart technologies to enhance the resilience of communities and health care facilities is another adaptation measure elaborated in the country's NDC. There are several indicators that have been identified to track its implementation progress. These include reporting the number of facilities with back-up power supply, climate proof water facilities such as boreholes and water tanks and internet back-up (**Figure 8**). Climate smart infrastructure ensures that health facilities can still be operational and accessible during adverse weather conditions or extreme climatic events. Regional Health Management Teams (RHMT) have an overall oversight on health infrastructure and technology and are, therefore, responsible for reporting progress in implementation of this NDC target.

DATA COLLECTION TEMPLATE FOR TECHNOLOGY AND INFRASTRUCUTURE

Adaptation action	Indicator	Units	Baseline	Current Date			Reporting year	Actual for the reporting period	Responsible department
				Day	Month	Year			
Information row	*Indicator data to be collected (no input required)*	*Insert units*	*Insert the baseline value*	*Select from the drop-down list*	*Select from the drop-down list*	*Select from the drop-down list*	*This is the year that relates to the data entry. Select year from drop-down list*	*Insert the data value for the indicator*	
Example row	*% of health facilities with sanitation facilities*	*%*	*97*	*23*	*September*	*2024*	*2023*	*97*	*RHMT*
Adopting sustainable climate smart technologies to enhance the resilience of communities and health care facilities	Health infrastructure building and location guidelines developed		No						RHMT
	# of health facilities with climate proof water facilities								RHMT
	# of health facilities with backup power supply								RHMT
	# of health facilities with boreholes installed								RHMT
	# of health facilities with functional boreholes								RHMT
	# of health facilities with water tanks installed								RHMT
	# facilities with internet backup								RHMT

Figure 8: A section of the reporting template on technology and infrastructure

4.1.6. Water, Sanitation and Health (WASH)

Water, Sanitation and Hygiene have a huge bearing on health outcomes. If people do not have access to clean and safe drinking water, there will be an increase in water related diseases such as cholera, diarrhoea, skin diseases, etc. Equally, poor waste management practices, especially household and industrial waste, leads to the spread of diseases. There are two adaptation actions in WASH that need to be tracked; ensuring secure climate proof WASH infrastructure to increase community resilience and boost adaptative capacity, as well as using co-benefits from mitigation measures such as the use of clean technologies in waste and wastewater management (**Figure 9**). These actions are monitored by the Environmental Health Department working with other stakeholders in WASH. The actions measure the adaptation actions in public facilities as well as homesteads.

DATA COLLECTION TEMPLATE FOR WATER, SANITATION AND HEALTH (WASH)

Adaptation action	Indicator	Units	Baseline	Current Date			Reporting year	Actual for the reporting period	Responsible department	Comments
				Day	Month	Year				
Information row	*Indicator data to be collected (no input required)*	*Insert units*	*Insert the baseline value*	*Select from the drop-down list*	*Select from the drop-down list*	*Select from the drop-down list*	*This is the year that relates to the data entry. Select year from drop-down list*	*Insert the data value for the indicator*		
Example row	*Percentage of population with access to potable/safe water supply*	*%*	*69*	*23*	*September*	*2024*	*2023*	*69*	*EHD*	*sourced from the UNICEF, Eswatini*
Secure climate proof WASH infrastructure to increase community resilience and boost adaptative capacity	Proportion of population with access to climate proof sanitation facilites	%							EHD	
	Proportion of population with access to potable/safe water supply	%							EHD	
Using co-benefit from mitigation measures -clean technologies in waste and wastewater management	# of private institutions including health facilities and schools that have developed and are implementing waste management plan with clean technologies		0						EHD	
	# of public institutions including health facilities and schools that have developed and implementing waste management plan with clean technologies		0						EHD	

Figure 9: A section of the reporting template on water, sanitation and health (WASH)

4.1.7. Health financing

Health financing is an important subject and ensures that the public has access to equitable health services. The health sector has a huge leaning towards donor funds and therefore many of the programmes that are able to make headway are financed by partners. This is a disadvantage for the country because the donor funds are biased towards the programmes where donors currently have an interest in and other programmes remain under financed. An increase in funding for climate related diseases will reduce health inequities and vulnerabilities associated with climate change. Thus, the NDC adaptation target for health financing focuses on financing health actions to address inequities and climate related vulnerabilities **(Figure 10**). The specific actions are lobbying government to allocate funds for climate finance, resource mobilisation initiatives and proposal writing targeting donor funds. As the government od Eswatini is working on tagging climate funds through the Ministry of Economic Planning and Development, they are the key Ministry to report on climate finance funds received, working together with the MOH Planning Unit.

DATA COLLECTION TEMPLATE FOR CLIMATE FINANCING

Adaptation action	Indicator	Units	Baseline	Current Date			Reporting year	Actual for the reporting period	Responsible department
				Day	Month	Year			
Information row	*Indicator data to be collected (no input required)*	*Insert units*	*Insert the baseline value*	*Select from the drop-down list*	*Select from the drop-down list*	*Select from the drop-down list*	*This is the year that relates to the data entry. Select year from drop-down list*	*Insert the data value for the indicator*	
Example row	*% of budget allocated for climate change activities*	*%*	*2*	*23*	*September*	*2024*	*2023*	*2*	*MOH Planning /MEPD*
Financing health actions to address inequities and climate related vulnerabilities	# of private sector funding climate change health related vulnerability interventions								MOH Planning /MEPD
	# of proposals submitted for funding								MOH Planning /MEPD
	# of climate change funded projects implemented								MOH Planning /MEPD
	# of resource mobilisation strategies implemented								MOH Planning /MEPD
	% of budget allocated for climate change activities								MOH Planning /MEPD
									MOH Planning /MEPD

Figure 10: A section of the reporting template on health financing

5. Conclusion

The ICAT Phase II Project aimed to assist the Kingdom of Eswatini develop a Measurement, Reporting and Verification (MRV) Implementation Framework (including data collection templates, guidance documents, roles and responsibilities) to track adaptation actions in the health sector. These elements are essential to provide information necessary to compile the health sector components of the Adaptation Biennial Transparency Report (A-BTR) as well as build capacity for reporting by developing health sector institutional arrangements. The Guidance Document has presented the monitoring and reporting principles for MRV of adaptation in the health sector. The document outlines the key reporting instruments to the UNFCCC, in line with the Paris Agreement, with a particular reference to the ETF and the BTR. It further delves into the institutional arrangements for collecting the data needed for reporting. A detailed guidance for using the reporting templates by experts who provide data for the reporting is also included. It must be noted that the proposed MRV framework is designed to track the implementation of the NDC. Overall, reporting to the UNFCCC at this stage remains the responsibility of the Climate Change Unit in the department of Meteorology, MTEA. For the success in implementing these guidelines, all the relevant stakeholders must be actively engaged.