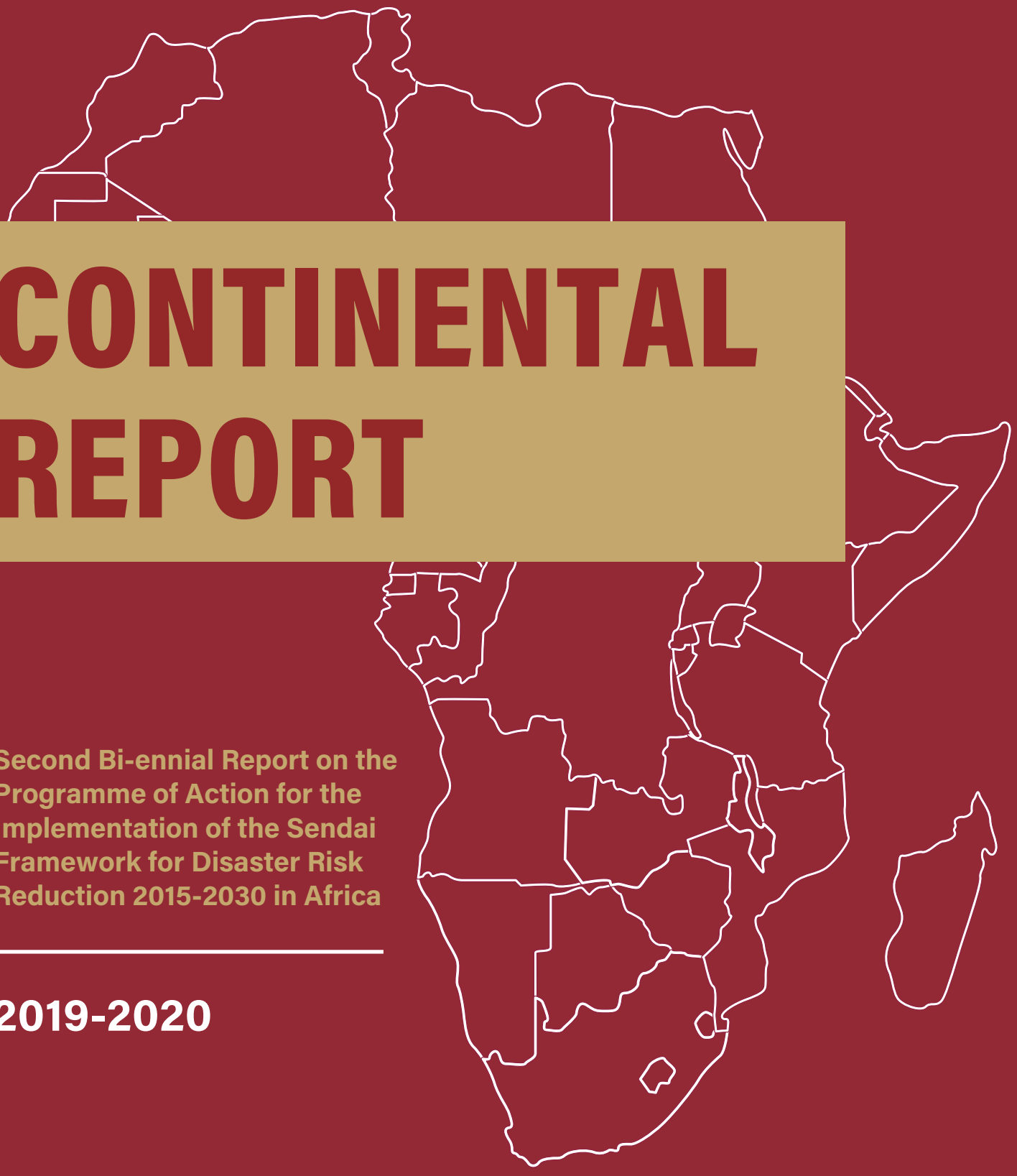
African Union



CONTINENTAL REPORT

Second Bi-ennial Report on the Programme of Action for the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 in Africa

2019-2020

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ABBREVIATIONS & ACRONYMS

ACMAD	African Centre of Meteorological Application for Development
AfRP	Africa Regional Platform for DRR
AfSTAG	Africa Science and Technology Advisory Group
ARC	African Risk Capacity
ARSDRR	Africa Regional Strategy for Disaster Risk Reduction
AU	African Union
AUC	African Union Commission
AWGDRR	African Working Group on Disaster Risk Reduction
AU63	African Agenda 2063
A-YAB	Africa Youth Advisory Board
CAPC-AC	Centre of Applications and Climate Forecast of Central Africa
CCA	Climate Change Adaptation
DIRAJ	Disaster Risk Reduction Network of African Journalists
DRC	Democratic Republic of the Congo
DRR	Disaster Risk Reduction
DRRU	Disaster Risk Reduction Unit
DRM	Disaster Risk Management
DRMICS	Regional Disaster Risk Management Information and Communication Systems
EAC	East Africa Community
ECCAS	Economic Community of Central African States
ECO-DRR	Ecosystems-based Disaster Risk Reduction
ECOWAS	Economic Community of West African States
EWS	Early Warning Systems
HFA	Hyogo Framework for Action (2005-2015)
ICPAC	IGAD Climate Prediction and Application Centre
IGAD	Intergovernmental Authority on Development
INFORM	Index for Risk Management
MRF	Monitoring and Reporting Framework for the Programme of Action for the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 in Africa
MS	Member States
NMHSs	National Meteorological and Hydrological Services
PoA	Programme of Action for the implementation of the Sendai Framework for Disaster Risk Reduction (2015-2030) in Africa
RECs	Regional Economic Communities
RVAA	Regional Vulnerability Assessment and Analysis
SADC	Southern Africa Development Community
SARCOF	Southern African Regional Climate Outlook Forum
SASDiR	Southern Africa Society for Disaster Reduction
SAWIDRA	Satellite and Weather Information for Disaster Resilience in Africa
SDGs	Sustainable Development Goals
SFDRR	Sendai Framework for Disaster Risk Reduction 2015-2030
SFM	Sendai Framework Monitor
SHOC	SADC Humanitarian Operations Centre
UMA	Union du Maghreb Arabe
UNDRR	United Nations Office for Disaster Risk Reduction

FOREWORD

CONTINENTAL CHAMPION FOR DRR

I am pleased to present the Biennial Report on the Programme of Action for the Implementation of the Sendai Framework for Disaster Risk Reduction in Africa (2019-2020).

Soon after the adoption of the Sendai Framework for Disaster Risk Reduction (2015-2030), the African Union Member States developed the Programme of Action (PoA) for the Implementation of the Sendai Framework for Disaster Risk Reduction in Africa, which they endorsed in 2017. In 2018, the High-level Ministerial Meeting on Disaster Risk Reduction adopted the Monitoring and Reporting Framework for the PoA. It tasked the African Union Commission to develop the Biennial report using the Monitoring and Reporting Framework. Over the past years, the African Union decision-making bodies have increasingly shown commitment to implement and track the continent's progress in implementing its Disaster Risk Reduction frameworks.

While noting encouraging progress in some areas, like policy and institutional development, multi-hazard early warning systems, and partnerships on DRR, among others, the report still notes some challenges and obstacles that the African Union Member States have to address if we are to build resilience and thereby reduce the impact of disasters by 2030. The report points to the need to strengthen our preparedness and recovery mechanisms. While it is pleasing to note that there has been an increase in availability of multi-hazard early warning systems, the anticipatory action mechanisms need to be strengthened. Beyond response, which we as a continent have been growing from strength to strength, we need to ensure our societies and economies recover well from the disasters that continue to hit them. The report points out that there is a need for increased efforts and investments in recovery and reconstruction mechanisms and resilience. The recent disasters have shown that we must ensure development takes into account disaster risk. We must urgently enhance resilience in urban and infrastructural development, strengthen community resilience to growing shocks and disasters, and improve disaster risk governance mechanisms. While building resilience is a work in progress, the recent disasters have reminded us of the sense of urgency for the continent to expedite establishment of Pan African Civil Protection mechanism that will not only ensure that the African Union is capable to respond swiftly to disasters within the continent but at global scale.

Building resilience requires systematic risk assessment. However, capacity for data collection remains a challenge, as noted by the previous biennial report, which covered 2015-2018. It is of great importance for African Union Member States to consider strengthening institutional capacities for data collection and reporting on DRR. Without accurate reports on losses, we may not fully appreciate the impact disasters have on our societies and economies.

I commend the dedication of the DRR focal points at the regional and national levels, UN agencies and other partners, who came together to give technical support to the development of this report. I would like to extend the African Union's gratitude to the EU and Government of Sweden for their financial support for the development of the Biennial report.

May the African Union Member States stay informed and guided by this report as we seek to intensify our efforts to attain the global targets of the SFDRR and the PoA targets.

Filipe Jacinto Nyusi
President, Republic of Mozambique
African Union Champion for Disaster Risk Management

FOREWORD

AU COMMISSIONER

Endorsed by the African Union Executive Council and the Assembly of Heads of State and Government in 2017, the Programme of Action (PoA) for the Implementation of the Sendai Framework for Disaster Risk Reduction (SFDRR) in Africa requires the African Union Commission to facilitate a biennial report to assess its implementation. The Biennial Report on the Programme of Action for the Implementation of the Sendai Framework for Disaster Risk Reduction in Africa assesses the progress towards the global targets of the SFDRR and the Africa-specific targets outlined in the PoA. The first report, which covered the period 2015-2018, was launched in 2020 in a high-level meeting by the President of the Gambia. The African Union Commission is pleased to present the second biennial report covering 2019-2020.

Like its predecessor, this current report shows how disasters continue to hurt the economies of African Union Member States. While this report notes that the number of recorded disasters has reduced compared to the previous years, it establishes that the mortalities and economic losses have increased, and that the vulnerability of the African Union Member States is not improving. These findings show the challenge that Africa continues to find itself in. The report points to an urgent need for all AU MS to strengthen their disaster resilience. The report notes the urgent need for Africa to strengthen preparedness and recovery mechanisms. There is a need to prioritise preparedness and early action mechanisms and invest more in recovery initiatives for Africa to be a resilient continent.

We thank all the DRR experts at the national and regional levels who committed their time and resources to make this second report a reality. We also thank the United Nations Office for Disaster Risk Reduction and other UN agencies, International Organisations, academic networks, AYAB-DRR, AfSTAG-DRR, and AUC departments for the technical guidance and support they offered in the development of this report. We also sincerely thank the European Union (EU) and Organisation of Africa Caribbean and Pacific Group of States (OACPS) and Government of Sweden through United Nations Development Programme (UNDP) within the framework of Sahel Resilience for the financial support given to this project.

It is pleasing to note the continued commitment and support to developing the biennial report, which has successfully highlighted the continent's critical progress and challenges regarding DRR.

We look forward to continued support and strengthened rigour as we seek to document our successes and ways to address the challenges identified by the Biennial Report on the Programme of Action for the Implementation of the Sendai Framework for Disaster Risk Reduction in Africa.

Amb. Josefa Leonel Corriea Sacko
Commissioner
Department of Agriculture, Rural Development, Blue Economy and Sustainable Environment
African Union Commission

EXECUTIVE SUMMARY

Africa is a continent that is particularly vulnerable to disasters due to its geographic location, climatic conditions, and socio-economic factors. The frequency and severity of disasters such as floods, droughts, cyclones, and epidemics have devastating impacts on the region, resulting in loss of lives, displacement, and damage to infrastructure and the economy. The impacts of disasters are particularly acute in Africa's vulnerable communities, where poverty, poor infrastructure, and limited access to resources exacerbate their vulnerability. The Sendai Framework for Disaster Risk Reduction (SFDRR) is a global blueprint for reducing disaster risk and building disaster resilience. The SFDRR was adopted in March 2015 at the Third United Nations World Conference on Disaster Risk Reduction held in Sendai, Japan.

The framework aims to guide national and local efforts to reduce disaster risk and to address the underlying drivers of risk. In Africa, the SFDRR has provided a platform for improving disaster risk management and promoting resilience building. The Programme of Action (PoA) for implementing the SFDRR (and it's Matrix 2.0 for implementation) in Africa is a comprehensive strategy for reducing disaster risk and building resilience in the continent. The PoA was developed in recognition of the unique disaster risk landscape of Africa and the need for region-specific approaches to disaster risk reduction. The PoA provides a roadmap for implementing the SFDRR in Africa, outlining specific priorities, targets, and actions that can be undertaken at national, regional, and continental levels.

The African Union's Heads of State and Government, in the 28th Extraordinary Summit in January 2017 in Addis Ababa, Ethiopia, endorsed the PoA. The PoA outlines how Africa aims to implement the SFDRR on the continent. The African Union Commission (AUC) is the PoA's custodian and must report on its implementation biennially. There are seven SFDRR targets which all MS aim to achieve within the four priorities of the SFDRR (understanding disaster risk, strengthening disaster risk governance, investing in disaster risk reduction, and enhancing disaster preparedness).

The seven targets of the SFDRR are:

A Substantially reduce continental disaster mortality by 2030

B Substantially reduce the number of affected people continentally in Africa by 2030

C Reduce direct disaster economic loss in relation to continental gross domestic product (GDP) by 2030

D Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030

E Substantially increase the number of countries with national and sub-national/local disaster risk reduction strategies by 2020

F Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement national actions for implementation of the Sendai Framework by 2030

G Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030.

In addition to achieving the above targets, African countries aim to achieve the five additional targets of the PoA, which are to:

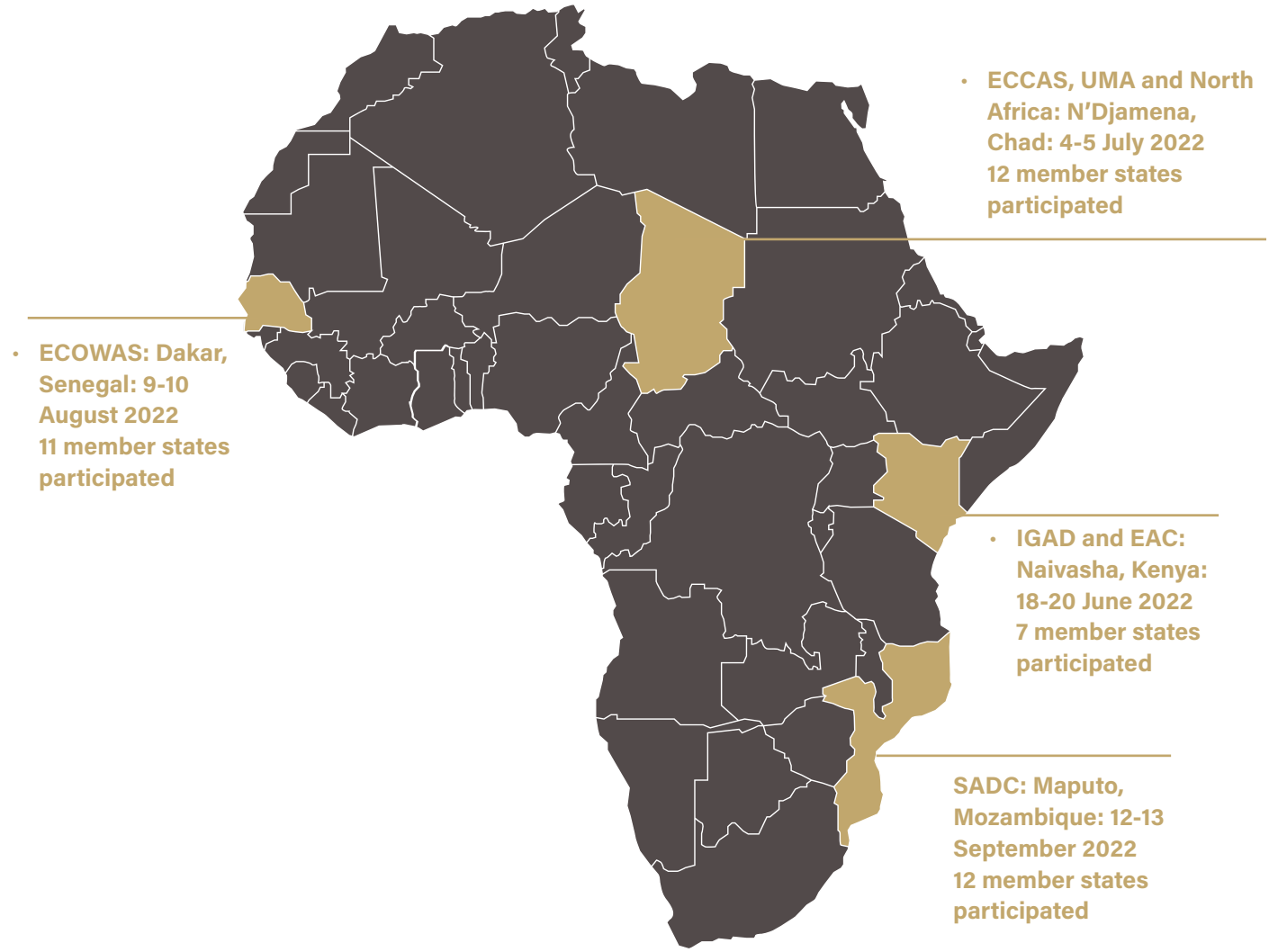
1. Substantially increase the number of countries with DRR in their educational systems at all levels, as both stand-alone curriculum and integrated into different curricula;
2. Increase integration of DRR in regional and national sustainable development, and climate change adaptation frameworks, mechanisms and processes;
3. Substantially expand the scope and increase the number of sources for domestic financing in DRR;
4. Increase the number of countries with, and periodically testing, risk-informed preparedness plans, and, response, and post-disaster recovery and reconstruction mechanisms; and
5. Substantially increase the number of regional networks or partnerships for knowledge management and capacity development, including specialised regional centres and networks.

The PoA Monitoring and Reporting Framework outlines thirteen (13) indicators for the five (5) additional targets of the PoA over the period 2015- 2030. Of these thirteen indicators, data for nine (9) indicators is collected at the member state level through DRR National Focal Points, while data for the remaining four (4) indicators is collected at the REC level through DRR REC Focal Points. These 13 indicators are

These 13 indicators are:

1. Percentage of countries with DRR curricula in their educational systems at all levels.
2. Percentage of RECs with DRR integrated in regional sustainable development frameworks, mechanisms and processes.
3. Percentage of countries with DRR integrated in national sustainable development frameworks, mechanisms and processes.
4. Percentage of RECs with DRR integrated in climate change adaptation frameworks, mechanisms and processes.
5. Percentage of countries with DRR integrated in climate change adaptation frameworks, mechanisms and processes.
6. Total number of DRR programmes and activities domestically funded.
7. Total cost of DRR programmes and activities domestically funded.
8. Percentage country-level disbursement of funds for DRR programmes and activities.
9. Percentage of total cost of DRR programmes and activities domestically funded.
10. Percentage of countries with risk-informed preparedness plans, response, post-disaster recovery and reconstruction mechanisms.
11. Percentage of countries periodically testing their preparedness plans, response, post-disaster recovery and re construction mechanisms.
12. Number of regional networks or partnerships for DRR knowledge management and capacity development.
13. Number of specialised DRR regional centres established and operational.

The primary data collection instrument for the Biennial Report was an online data collecting survey administered through regional data gathering workshops which were held from June-September 2022 across Africa. Four regional workshops were held:



Map 1: Regional data gathering workshops (June-September 2022)

In total 42 countries (76%) participated in the data collection workshops. Apart from the regional workshops, an online tool was used to collect data from MS. During 2019-2020 there was a significant decrease in MS participation using the online tool, with only 57% submitting information through the data collection tool compared to 91% in 2017-2018. Out of the 55 countries, 31 submitted partial information through the online data collection tool, and 24 MS did not use the data collection tool to participate in this reporting period. To augment the data collection process, an additional workshop (held in Dar Es Salaam, Tanzania in March 2023) and the initial validation workshop (held in Addis Ababa, Ethiopia in June 2023) were used to collect data from several MS that did not provide information through the online tool. Through the various data collection platforms, the research team managed to collect data from all 55 MS, although it should be noted that data gaps still remain due to data collection and management constraints experienced by several MS.

THE KEY FINDINGS OF THE REPORT INCLUDE:

Table 1: Key Findings Continental Report

Topic/Target	Key Points/Details
Recorded disaster events increase (2017/8 to 2019/20)	Decreased from 521 to 496, mostly due to decreases in North Africa
Major disaster types	Droughts, floods, storms, epidemics and transportation accidents caused the most loss in lives, livelihoods, critical infrastructure, and had the greatest economic impact.
Disaster trends (2017/8 to 2019/20)	Droughts, storms and transportation stayed relatively the same, with floods doubling in occurrence.
Sendai Target A: Reduce disaster mortality	Increase in disaster mortalities in Africa from 22 330 in 2017-2018 to 42 275 in 2019-2020. These increases are mostly due to storms, floods, and epidemics.
Sendai Target B: Reduce the number of affected people	In 2017-2018 a total of 21 596 732 persons were affected by disasters, this increased to 86 956 523 in 2019/2020
Sendai Target C: Reduce direct disaster economic loss	Direct economic damages due to disaster was calculated at US $1.1 billion in 2017-2018, which decreased to US$ 786 million in 2019-2020.
Sendai Target D: Reduce disaster damage to critical infrastructure	Severe lack of reporting resulting in the inability to compare the reporting periods accurately. Difficulties in reporting data on damage to critical infrastructure and disruption of basic services. Significantly under-reported.
Sendai Target E: Increase DRR strategies	The number of MS with DRR strategies increased from 40 in 2017-2018 to 44 in 2019-2020.
Sendai Target F: Increase international cooperation	This was one of the best-performing targets, with all 55 MS reporting at least one or multiple cooperative partnerships. Significant international cooperation with Member States since 2015, evident in bi- and multilateral cooperation within Africa.
Sendai Target G: Increase early warning systems	There was a significant increase in MHEWS from 62 in 2017-2018 to 81 in 2019-2020. Single Hazard EWS increased from 49 to 50 between the same reporting period.
PoA Additional Target 1: DRR in education	POA target 1 has only achieved limited achievement on the continent with limited uptake in primary and secondary school curricula.
PoA Additional Target 2: DRR integration in development, climate change adaptation	For POA target 2 the continent reached limited achievement, however, there is a clear upward trend in the target scores since reporting began. Many best practice examples from the various RECs support this upward trend.
PoA Additional Target 3: Expand domestic financing in DRRww	The continent is showing moderate progress in achieving POA Target 3. It should be noted that the number of domestically funded DRR programs have fluctuated over time on the continents with 153 in 2015-2015, 444 in 2016-2017 and a decrease to 330 funded programs in 2019-2020. Many MS are still significantly under-reporting the number of sources for domestic financing in DRR. MS indicated that the following reasons for under reporting i.e. funding is spread across various sectors and spheres of government. Additionally, the definition of the Target is unclear, making data collection problematic.
PoA Additional Target 4: Increase risk-informed preparedness plans	The continent's achievement of POA Target 4 is at a level of moderate achievement trending upwards. Most MS have a strong tradition of developing, testing and implementing risk-informed preparedness response, post-disaster recovery and reconstruction plans and mechanisms. Noteworthy increases in preparedness planning during the reporting cycle occurred in, ECCAS, SADC and North Africa.
PoA Additional Target 5: Increase regional networks for knowledge management, capacity development	The continent has scored a moderate level achievement for target 5. Significant progress has been made in establishing regional networks especially amongst research/academic sectors and public institutions responsible for disaster risk management. More networks should be created to manage cross-boundary risks.

The data collected for the Biannual Report reveals that during the 2019-2020 reporting cycle, the continent only made limited progress towards the SFDRR Targets, with only **2 out 7 SFDRR targets achieved**. The achievement of the POA target during the reporting period was slightly better, with **moderate scores achieved for 3 out of 5 POA targets**. Consequently, there is still room for significant improvement by the AUC, RECs and MS in subsequent reporting cycles to achieve SFDRR and POA targets.

Following the data collected and emerging trends, recommendations will be made to improve the continent's efforts to achieve the SFDRR and POA targets. However, before it is possible to make recommendations relevant to the 2019-2020 reporting cycle, it is essential to reflect on MS and REC's progress in addressing the recommendations from the 2017-2018 reporting cycle.

Table 2: Implementation of recommendation emanating from 2017-2018 continental report

Recommendation	Status of implementation
Member States must make significant efforts to use the existing Sendai Framework Monitor as well as DesInventar as tools for continued reporting and capturing of data.	**Partial Implementation** Trainings has been conducted on SFM and DesInventar. However, very few member states currently use the SFM to its full potential and therefore, the SFM cannot provide a conclusive benchmark for measuring progress against SFDRR targets.
Member States, with the assistance of the RECs' DRR Units, must plan for a continued data collection and reporting process using the data capturing tools provided by UNDRR and supported by the AUC.	**Partial Implementation** As indicated in the first recommendation, not all AU member states have been using data-capturing tools provided by the UNDRR. Data collection also needs to be more consistent and complete for many targets. MS and RECs should therefore continue working towards implementing this recommendation.
Member States must work towards strengthening national DRR platforms for cross-sectoral reporting and coordination.	**Partial Implementation** Although many MS have national DRR platforms, facilitating cross-sectoral reporting and coordination still needs to be achieved. During the research, MS indicated that this is especially true in terms of the collection of data on economic and infrastructure losses and funding of DRR. In many instances, departments need to share the information, which makes it difficult to assess the economic impacts of disasters and current funding allocation for DRR across the continent.
Where not present, a designated SFDRR focal point must be appointed/designated by each Member State, and this must be communicated to the RECs' DRR Unit, the AUC and UNDRR to ensure future continuity in reporting on the SFDRR and PoA.	**Partial Implementation** Whilst some stability exists in SFDRR focal points in some MS and REC (e.g SADC), this is different for the continent. High-staff turnover in DRR units in many MS, leads to new focal points being appointed constantly. This has caused disruption in the sharing and validation of MS data throughout the research process.
To achieve the envisioned biennial reporting on the SFDRR and PoA, Member States and the RECs' Secretariat must strive to establish a relationship with at least one regional research institution.	**Satisfactory Implementation** During 2019-2020, it was shown that MS's most common partnership in carrying out their disaster management activities had been their relationship with individual research institutions or research networks (e.g. Peri-Peri U/ SASDIR). It should be noted that although common, these connections are not present in all member states, and there should be continuous efforts to establish collaboration with research institutions in all MS.

Recommendation	Status of implementation
Lessons from this report indicates that a comprehensive biennial report cannot be compiled at the end of each two-year term but should be a living document supported by institutional data repositories which are constantly updated. Universities/research centres in the region are ideally placed to fulfil this role.	Not implemented The Covid-19 pandemic significantly hampered data collection and reporting efforts on other disasters, as much of the human resources of MS DRR units were dedicated to addressing the pandemic. Consequently, efforts to consistently provide data contributing to the bi-annual report becoming a " living document" were severely derailed. Additionally, a reliable and easy-to-use online data collection tool must still be designed to ensure consistent participation and data reporting by member states. Although such a platform is being designed, it will likely only come online in 2024.
Significant financial and technical support is needed for national DRR structures to report on economic losses and DRR financing (Target C of SFDRR) and DRR funding (Additional Target 3 of PoA).	Not implemented. During the 2019-2020 reporting cycle, all the targets that include economic data components, such as SFDRR targets C, D and POA 3, were the most poorly reported on target throughout the continent. Therefore this recommendation is still relevant going into the 2021-2022 reporting cycle.
MS might need to consider compliance at national levels by including biennial DRR reporting as a legislative requirement.	Information on implementation is not known
Annual national-level reporting on the SFDRR and PoA must be enforced and upscaled to the REC level.	Information on implementation is not known
Specific emphasis must be placed on ensuring disaggregated (gender, age, abilities etc.) and Metadata.	Not implemented No disaggregated data was provided by MS to gain a better understanding of the gender, age and ability dynamics of disaster impacts on the continent. However, the AUC, RECs and MS have made a concerted call for the inclusion of disaggregated categories in future data collection tools and platforms linked to the biennial reporting periods.
The RECs' DRR Units need to play a leading role in coordinating regional reporting on the SFDRR and the PoA.	Satisfactory Implementation Most RECs have been key in coordinating regional reporting on the SFDRR and the POA during 2019-2020. However, these coordination efforts should continue for the subsequent reporting periods.
Periodic face-to-face working sessions of Member States DRR Technical officers should be conducted in order to consolidate and report on progress across all the PoA targets.	Information on implementation is not known
Member States should engage the media to communicate the results of the biennial reporting to ensure stakeholder engagement.	Information on implementation is not known

Due to the partial and non-implementation of many of the recommendations that emerged during 2017-2018 for the 2019-2020 reporting cycle, these recommendations remain relevant and should be addressed during the 2021-2022 reporting cycle. Apart from addressing the outstanding recommendation from the previous reporting cycle, MS and RECs will have to address the recommendations that have emerged from the 2019-2020 reporting cycle.

RECOMMENDATIONS EMERGING FROM THE 2019-2020 REPORTING CYCLE

- The AUC, RECs and MS should develop an agreed-upon methodology to assess the direct economic losses inflicted by disasters.
- MS and RECs poorly record direct disaster losses. Better coordinating mechanisms must be put in place, and it is suggested that MS and RECs make concerted efforts to establish linkages with their national research institutions and universities which can play a valuable role in gathering and managing such data on an ongoing basis.
- The AUC, RECs and MS should develop an agreed-upon methodology to assess the nature and extent of monetary losses inflicted by disasters on critical infrastructure and disruption of critical service delivery.
- MS should invest more financial resources in developing data collection technology and skills at all levels of government, especially the local level, to improve data collection relating to SFDRR targets A, B, C and D.
- The AUC and appropriate RECs should make concerted efforts to support the MS who do not have national policies, laws and strategies for DRR in place yet.
- Funding tracking streams should be created to track the funds allocated to DRR policy and strategy implementation at all spheres of government, and these should be reported annually to the REC.
- Although bi- and multi-lateral cooperation for DRR on the continent is extensive, MS should advocate more strongly for technical and monetary assistance that suits their risk profiles and DRR needs.
- MS and RECs should continue collaborating with multiple donors and academic and community partners to develop or improve early warning systems to facilitate early action and reduce losses across the African continent regarding lives and livelihood.
- RECs should prioritise the development of cross-border multi-hazard early warning systems that support national early warning systems.
- A more concerted effort is needed in all regions to engage MS to include DRR, specifically in primary and secondary education. The various departments of education should drive integration efforts in MS in cooperation with international cooperating partners and institutions of higher learning.
- MS should establish institutional and technical mechanisms to improve intergovernmental data sharing relating to economic infrastructure and service delivery losses due to disasters.
- MS should improve cooperation between governmental departments responsible for climate change adaptation and disaster risk reduction at policy, legislative and project implementation levels.
- Encourage efforts by the insurance sector in MS to integrate DRR into more of their activities and insurance products.
- MS and RECs should establish mechanisms for tracking domestically funded DRR projects to improve reporting on PoA Target 3.
- Continuously develop technical abilities and skills of disaster risk management personnel and community volunteers to improve preparedness planning within MS.
- MS and RECs should develop more partnership networks to manage cross-boundary risks.
- Annual national-level reporting on the SFDRR and PoA must be enforced and upscaled to the REC level.
- Specific emphasis must be placed on ensuring disaggregated (gender, age, abilities etc) and metadata.
- National disaster risk reduction structures and the RECs' DRR Units must be strengthened with more human resources and ICT skills and infrastructure.
- The RECs' DRR Unit must lead in coordinating regional reporting on the SFDRR and the PoA.
- Periodic face-to-face working sessions of MS DRR Technical officers to consolidate and report on

progress across all the PoA targets is needed.

- MS must engage the media to communicate the results of the biennial reporting to ensure stakeholder engagement.
- MS should collaborate with peers and partners and leverage existing mechanisms to advance the development and implementation of local DRR strategies.
- Variables and indicators reflecting the progress of youth involvement should be integrated into the reporting at both country and regional levels.

INTRODUCTION

The African continent, characterised by its diverse geography and vibrant cultures, has a complex relationship with natural and human-made hazards. Between 2018 and 2020, Africa experienced a series of crises that put the resilience of its nations and populations to the test. From environmental disasters like cyclones and droughts to public health emergencies and conflicts, the continent faced diverse challenges that required immediate action and careful long-term planning. This period witnessed a concerted effort across the continent to align disaster risk reduction strategies with the global vision laid out in the Sendai Framework for Disaster Risk Reduction (2015-2030) (SFDRR) and to achieve the objectives of the Programme of Action for the implementation of the SFDRR in Africa (PoA). The SFDRR is a global plan to reduce risk and strengthen resilience. It was established in March 2015 at the Third United Nations World Conference on Disaster Risk Reduction held in Sendai, Japan. Its purpose is to direct national and local efforts towards reducing disaster risk and addressing the root causes of risk. The PoA (with its Matrix 2.0 for implementation) in Africa is a comprehensive strategy for reducing disaster risk and promoting resilience on the continent. The PoA offers a roadmap for implementing the SFDRR in Africa, providing specific priorities, targets, and measures that can be taken at the national, regional, and continental levels. The African Union Commission (AUC) is responsible for overseeing and reporting on the implementation of the PoA every two years. This report is the second Biennial Report on implementing the PoA in Africa for 2019-2020.

ABOUT THIS BIENNIAL REGIONAL REPORT

The African Union's Heads of State and Government in the 28th Extraordinary Summit that took place in January 2017 in Addis Ababa, Ethiopia, adopted the PoA. The PoA outlines how Africa aims to implement the SFDRR on the continent. In June 2018, the African Union Commission (AUC) developed the *Monitoring and Reporting Framework (MRF)* for the *Programme of Action for the implementation of the Sendai Framework for Disaster Risk Reduction (2015-2030) in Africa* (PoA), which was adopted in October 2018, at the High-Level Ministerial Meeting on DRR, through the Tunis Declaration. This monitoring framework is guided by the SFDRR and PoA, and builds on the successes of the implementation of the Hyogo Framework of Action (2005-2015), the Africa Regional Strategy for Disaster Risk Reduction (ARSDRR) of 2004 and its Programme of Action (2005). The AUC, as the custodian of the PoA, is required to coordinate and report on the implementation of the PoA biennially. In adopting the MRF, the Ministers requested the African Union Commission to prepare the first Biennial Report on Disaster Risk Reduction in Africa using the MRF in 2019, which was adopted in January 2021. The current reporting cycle for biennial reporting is 2019-2020.

SCOPE AND AIM

The aim of the Report is to comprehensively report on the implementation of the Programme of Action for the implementation of the Sendai Framework 2015-2030 and the Africa Strategy for Disaster Risk Reduction for the period 2019-2020. This report focuses on all of the Member States of the AU.

OBJECTIVES

The objective is to use the outcome of the report to:

- Increase knowledge, inform, advocate and enhance understanding of disaster risks to inform DRR policy and programmes;
- Track progress against targets and indicators (see tables below for the performance indicators) and provide a future benchmark against which DRR progress can be measured;
- Identify best practices to share learnings/lessons among Member States; and
- Inform the development of DRR measures, including capacity development for future reporting.

METHODOLOGY

The study employed a similar methodology as the First Biennial Report. Both qualitative and quantitative data were collected. The study's main objective was to provide a report of Member States' and RECs' progress against the targets of the SFDRR and the Africa PoA's additional five targets for 2019-2020. Therefore, the reporting had also to consider the four Priority Areas of the SFDRR as they relate to the various targets. Quantitative data mostly related to the targets of the SFDRR, while reporting on the PoA was more qualitative and nuanced. An integrated survey for MS was developed and administered online during a number of workshops (see below). Two additional surveys were conducted, one for RECs and one for the AUC. The tables below show the core indicators for the SFDRR and the PoA additional targets.

Table 3: Summary of SFDRR targets contextualised in Africa as per the PoA and indicators[1]

Targets	Indicators[2]
Substantially reduce continental disaster mortality by 2030, aiming to lower the average per 100,000 continental mortality rate in the decade 2020–2030 compared to the period 2005–2015;	• **Number of deaths and missing persons attributed to disasters, per 100,000 population**
Substantially reduce the number of affected people continentally in Africa by 2030, aiming to lower the average continental figure per 100,000 in the decade 2020–2030 compared to the period 2005–2015;	• **Number of directly affected people attributed to disasters, per 100,000 population**
Reduce direct disaster economic loss in relation to continental gross domestic product (GDP) by 2030;	• **Direct economic loss attributed to disasters in relation to global gross domestic product**
Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030;	• **Damage to critical infrastructure attributed to disasters**
Substantially increase the number of countries with national and sub-national/local disaster risk reduction strategies by 2020;	• **Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030.** • **Percentage of local governments that adopt and implement local disaster risk reduction strategies in line with national strategies.**
Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement national actions for implementation of the Sendai Framework by 2030; and	• **Total official international support, (official development assistance (ODA) plus other official flows), for national disaster risk reduction actions.** • **Number of international, regional and bilateral programmes and initiatives for the transfer and exchange of science, technology and innovation in disaster risk reduction for developing countries.** • **Number of international, regional and bilateral programmes and initiatives for disaster risk reduction-related capacity-building in developing countries.** • **Number of developing countries supported by international, regional and bilateral initiatives to strengthen their disaster risk reduction-related statistical capacity.**

1 Source: Technical Guidance for Monitoring and Reporting on Progress in Achieving the Global Targets of the Sendai Framework for Disaster Risk Reduction

Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030.	• **Number of countries that have multi-hazard early warning systems** • **Percentage of population exposed to or at risk from disasters protected through pre-emptive evacuation following early warning.**

The PoA MRF outlines thirteen (13) indicators for the five (5) additional targets of the PoA over the period 2015-2030. Of these thirteen indicators, data for nine (9) indicators was collected at Member State level through DRR National Focal Points while data for the remaining four (4) indicators was collected at REC level through DRR REC Focal Points.

Table 4: Summary of PoA Additional Targets Performance Indicator[2]

PoA Additional targets	Indicators
Substantially increase the number of countries with DRR in their educational systems at all levels, as both stand-alone curriculum and integrated into different curricula	• **Percentage of countries with DRR curricula in their educational systems at all levels**
Increase integration of DRR in regional and national sustainable development and climate change adaptation frameworks, mechanisms and processes	• **Percentage of RECs with DRR integrated in regional sustainable development frameworks, mechanisms and processes** • **Percentage of countries with DRR integrated in national sustainable development frameworks, mechanisms and processes** • **Percentage of RECs with DRR integrated in climate change adaptation frameworks, mechanisms and processes** • **Percentage of countries with DRR integrated in climate change adaptation frameworks, mechanisms and processes**
Substantially expand the scope and increase the number of sources for domestic financing in DRR	• **Total number of DRR programmes and activities domestically funded**
	• **Total cost of DRR programmes and activities domestically funded** • **Percentage country level disbursement of funds for DRR programmes and activities** • **Percentage of total cost of DRR programmes and activities domestically funded**
Increase the number of countries with, and periodically testing, risk- informed preparedness plans, and, response, and post-disaster recovery and reconstruction mechanisms	• **Percentage of countries with risk informed preparedness plans, response, post- disaster recovery and reconstruction mechanisms** • **Percentage of countries periodically testing their preparedness plans, response, post-disaster recovery and reconstruction mechanisms**
Substantially increase the number of regional networks or partnerships for knowledge management and capacity development, including specialized regional centres and networks	• **Number of regional networks or partnerships for DRR knowledge management and capacity development** • **Number of specialised DRR regional centres established and operational**

2 Source: Monitoring and Reporting Framework for the Programme of Action for the Implementation of the Sendai framework in Africa

DATA COLLECTION TOOLS

For baseline information, data relevant were extracted from the INFORM database for the years 2019-2020, and HFA reporting up until 2020. INFORM is a collaboration of the Inter-Agency Standing Committee Reference Group on Risk, Early Warning and Preparedness and the European Commission. The European Commission Joint Research Center is the technical lead of INFORM. The INFORM model is based on risk concepts published in scientific literature and envisages three dimensions of risk: hazards and exposure, vulnerability and lack of coping capacity dimensions. INFORM uses 25 different international databases for its various indicators. Some include Agriculture Stress Index Probability of the Food and Agricultural Organization of the UN (FAO), personal remittances, received (% of GDP) by the World Bank, International humanitarian aid by the Financial Tracking Service by UN Office for Coordination of Humanitarian Affairs (OCHA), and the Conflict Barometer - HIIK by the Heidelberg Institute for International Conflict Research. Only data relevant to the creation of a baseline were selected. These were extracted and recorded.

Additionally, an online survey was used as the primary data collection tool. The survey was developed through rigorous consultation between the AUC and the research team. The Jotform platform was used because it allowed for easy extraction of previously reported data from the first biennial report The existing data could then be used for comparison purposes. The online survey remained active for the duration of the data collection period and beyond. In total only 31 member states (57%) provided data through the data through the online collection tool. Administrative changes (i.e. staff turnover) and connectivity issues were sighted by many MS as reasons why the could not fully utilise the online survey.

The low participation in the online survey necessitated the use of face to face data collection methods including regional data gathering workshops which were held from June 2022-February 2023 throughout the African Continent. A total of 42 countries (76%) participated in these initial data collection workshops. The MS participation and gender breakdown of the four workshops is highlighted below:

Table 5: Breakdown of participants

REC/s	No. of MS represented	Participants		Total
		Male	Female	
EAC and IGAD	7	17	2	19
ECCAS and North Africa	12	27	5	32
ECOWAS	11	21	6	27
SADC	12	16	10	26
Total	***42***	***81***	***23***	***104***

To augment the data collection process, an additional qualitative data collection workshop was held in Dar Es Salaam, Tanzania in March 2023 and the initial validation workshop (Addis Ababa, Ethiopia, June 2023) were used to collect data from several MS that did not provide information through the online tool or initial regional workshops. Through the various data collection platforms, the research team managed to collect data from all 55 MS, although it should be noted that data gaps still remain due to data collection and management constraints experienced by several MS.

DATA ANALYSIS AND INTERPRETATION

The quantitative data was analysed using the *Jotform* analytics engine. Where needed data was exported for further manipulation and analysis. All data was aggregated to the REC level for further analysis. The qualitative data were analysed and interpreted according to the various Targets of the SDFRR and PoA. In all cases the deeper meaning of the qualitative data were explored, and these appear as narratives linked to each Member State and REC.

For comparison and showing progress against the targets, the SFDRR and PoA "dashboard" was updated. The dashboard indicators are linked to a 5-point Likert scale (1 meaning no to little progress and 5 meaning comprehensive progress), as per the Monitoring and Reporting Framework requirements, were used. These were colour-coded for easy and visual reference (See Table 3 below). These colours are used throughout this report (in tables and maps) to facilitate reference and understanding.

Table 6: Likert scale rating of variables

Rating Key	Qualitative Criteria
1	No achievement or non-existent
2	Limited achievement
3	Moderate achievement, neither comprehensive nor substantial
4	Substantial achievement, additional progress
5	Comprehensive achievement

The aggregated scores of the two periods formed the basis of comparison. Where no data were reported, "n/a" was used. In total 13 different indicators (as per the MRF) were used to arrive at the composite country scores for 2015-2016; 2017-2018 and 2019-2020 respectively. The five-point scale allowed for qualitative comparison and thus the rating scale (e.g. 1-5) could be averaged where needed to arrive at an overall score for the period in question.

01

CHAPTER 1:

AFRICA'S DISASTER PROFILE

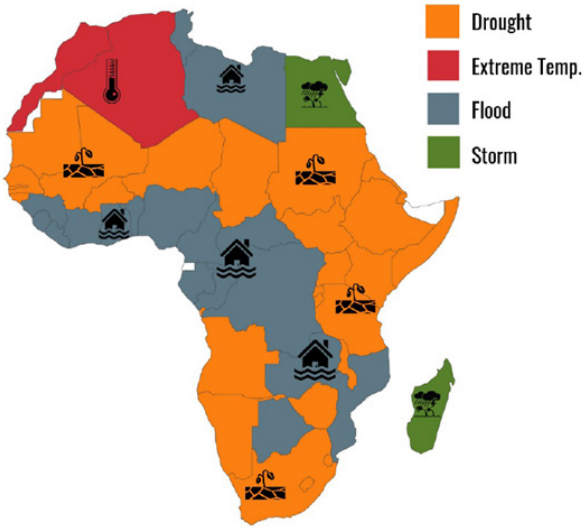
INTRODUCTION

Africa is a continent that is highly susceptible to various natural disasters such as droughts, floods, landslides, and epidemics, among others. In the period from 2019 to 2020, Africa experienced several disasters that had devastating effects on the population and the environment. Over this period, the continent has experienced several cyclones3. In March 2019, Cyclone Idai hit Mozambique, Malawi, and Zimbabwe, causing significant damage to infrastructure, agriculture, and homes. The cyclone killed over 1,000 people and left thousands homeless. Cyclone Kenneth also impacted on Mozambique in April 2019, causing more damage. In the same period, several African countries, including South Sudan, Somalia, Sudan, and Ethiopia, experienced heavy floods4. These floods caused displacement, loss of property, and loss of lives. In Sudan alone, over 60 people were killed, and thousands were displaced. In 2019, several countries in Africa, including Zimbabwe, Zambia, and Mozambique, experienced severe drought.

3 Source: UNICEF, 2019, ***Cyclone Idai and Kenneth:*** https://www.unicef.org/mozambique/en/cyclone-idai-and-kenneth

4 Source: OCHA, 2019. ***Eastern Africa: Floods impact 2.5 million people***: https://www.unocha.org/story/eastern-africa-floods-impact-25-million-people

This drought led to food shortages, malnutrition, and hunger, affecting millions of people. In 2019, several African countries, including the Democratic Republic of Congo and Uganda, experienced outbreaks of Ebola and measles. The Ebola outbreak in the DRC was declared a public health emergency of international concern by the World Health Organization (WHO)[5]. In 2019 and 2020, several countries in East Africa, including Kenya, Ethiopia, and Somalia, experienced severe desert locust infestations[6]. The swarms destroyed crops and vegetation, leading to food shortages and famine. Several African countries, including Cameroon, Libya, and Mali, experienced conflicts in the period from 2019 to 2020[7]. These conflicts led to displacement, loss of lives, and destruction of property. The COVID-19 pandemic has significantly impacted Africa since its outbreak in late 2019. As of April 2023, there have been over 10 million confirmed cases and over 210,000 deaths on the continent. The pandemic has significantly impacted Africa's economy, health systems, and social structures, which in turn has led to a decline in economic activity, with many businesses shutting down due to job losses[8]. The informal sector has been particularly hard hit, with many people losing their sources of income. The pandemic has also led to disruptions in global trade and supply chains, leading to shortages of essential goods and a decline in export earnings for many African countries. Africa's health systems have also been under significant strain, with essential equipment and medical personnel shortages. The pandemic has also led to declining routine health services, such as immunisation, maternal and child health, and HIV/AIDS care, as well as disruptions in education, social gatherings, and religious activities.- This conglomeration of negative factors have significantly impacted social structures of the communities.. The pandemic has also exposed the digital divide in Africa, with many people unable to access online education, healthcare, and other services. These disasters had devastating effects on the population, economy, and environment.



Map 2: Disaster Type Affecting Highest Number of People by Country
(Source: CRED, 2019)

Disaster events continued to increase from 2019-2020. However, a comparison of the three periods shows a decrease in most of the common disasters from the 2017-2018 to 2019-2020 period, except for landslides, insect infestation, and flooding- where flooding events more than doubled in frequency (Figure 1). While storm events have marginally decreased, in 2019 Cyclone Idai became the deadliest storm in Africa since 1990, causing 900 deaths in Mozambique and Zimbabwe.

5 Source: WHO. 2020. Ebola outbreak 2018-2020- North Kivu-Ituri: https://www.who.int/emergencies/situations/Ebola-2019-drc-

6 Source: SALIH, A. A. M., BARAIBAR, M., MWANGI, K. K. & ARTAN, G. 2020. Climate change and locust outbreak in East Africa. Nature Climate Change

7 Source: Amnesty International. 2021. *Sub-Saharan Africa: The devastating impact of conflicts compounded by COVID-19*: https://www.amnesty.org/en/latest/news/2021/04/subsaharan-africa-the-devastating-impact-of-conflicts-compounded/. & ISS. 2020. ***Conflict is still Africa's biggest challenge in 2020***: https://issafrica.org/iss-today/conflict-is-still-africas-biggest-challenge-in-2020

8 Source: World Bank. 2020. COVID-19 drives Sub-Saharan Africa Toward First Recession in 25 Years: https://www.worldbank.org/en/news/press-release/2020/04/09/covid-19-coronavirus-drives-sub-saharan-africa-toward-first-recession-in-25-years

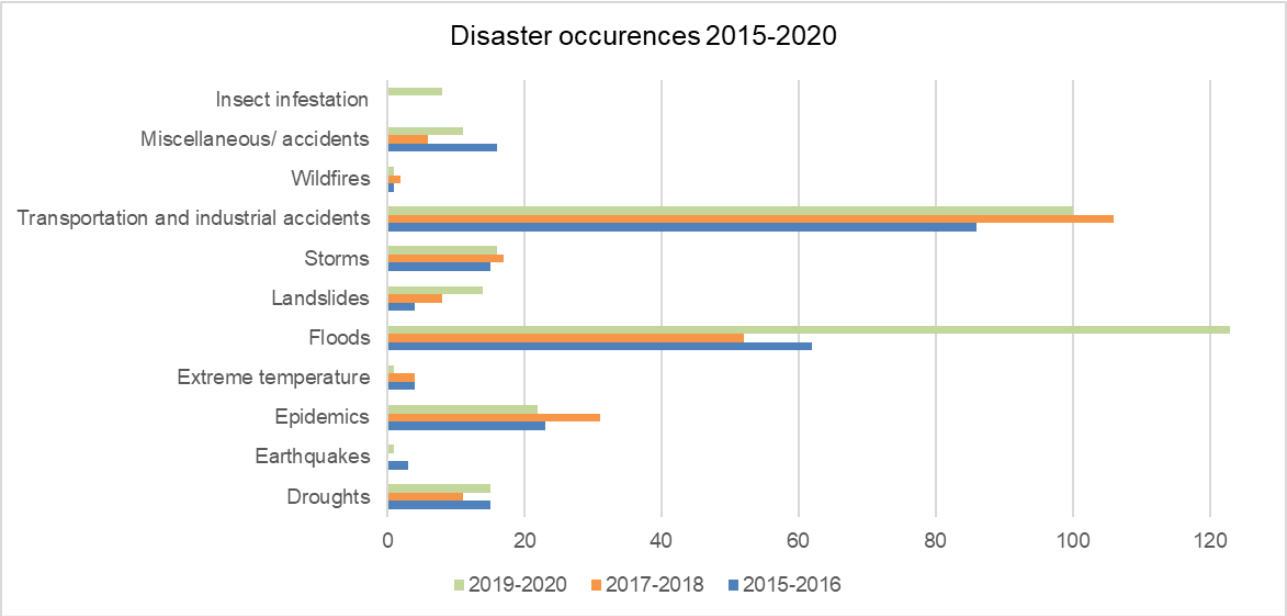


Figure 1: Recorded disasters in Africa (2015-2020).
(Source: EM-DAT: the Emergency Events Database - *Université Catholique de Louvain* (UCLouvain)

As can be observed from Table 7, disasters continue to ravage the continent. Although the number of events has decreased between 2017-2018 and 2019-2020, these fewer events have managed to cause more deaths (**42 275)** and a threefold increase in the number of people affected (**86 956 523)** and direct economic losses sustained **(US$ 786 787 235). The IGAD, EAC and SADC regions drove much of the increase**, indicating increases in all indicators. The hydrometeorological disasters experienced by these regions during the reporting period can be cited as drivers for the increases in continental trends. Specifically, significant storms such as Tropical Cyclone Idai and Kenneth in Malawi, Mozambique, and Zimbabwe, droughts in Somalia and Zimbabwe and floods in Kenya and Uganda caused significant losses in lives and damage to infrastructure and livelihoods. Between the two reporting periods, the ECCAS region only achieved a minor decrease in deaths due to disasters whilst indicating significant increases in the number of people affected by disasters and direct economic losses due to disasters. During 2019-2020, ECOWAS experienced a sharp increase in events, contributing to more deaths being reported in the region. However, this increasing number of disasters has affected fewer people and caused less economic damage. MS in the region has indicated that improving EWS and enforcing building and disaster management regulations contributed to the decrease achieved. North Africa indicated a decline in almost all indicators bar direct economic losses. The region has indicated a strong legacy of preparedness and recovery planning has helped to mitigate the impacts of disasters during the 2019-2020 reporting cycle.

Table 7: Continental and REC disasters and losses (2015-2020)

REC	No. of events			No. of deaths (Target A)			No. affected (Target B)			Direct economic loss ('000 US$) (Target C)		
	2015-2016	2017-2018	2019-2020	2015-2016	2017-2018	2019-2020	2015-2016	2017-2018	2019-2020	2015-2016	2017-2018	2019-2020
EAC	39	40	**105 ↑**	2 297	1579	**5664↑**	32,030,471	1 502 846	**8 833 251 ↑**	9 552 000	583 047	**22 929 570 ↑**
IGAD	30	39	**68 ↑**	1 306	1941	**5 904 ↑**	26 850 950	1 425 779	**27 637 946 ↑**	10 358 000	644 162 446	**199 423 070 ↓**
ECCAS	37	53	**73↑**	1 296	3 456	**5 933↑**	331 759	3 449 104	**2 811 020↓**	13 000	52 000 000	**50 333 000↓**
NORTH AFRICA	117	261	**41↓**	4 460	8 242	**1 304↓**	860 902	6 020 685	**1 707 029↓**	20 017 000	36 000 000	NDR
ECOWAS	53	53	**79 ↑**	2 726	2 433	**3 460 ↑**	3 162 466	2 591 132	**15 051 015 ↑**	85 321 000	368 259 000	**185 000 000 ↓**
SADC	80	90	**130↑**	2 893	4 679	**20 010 ↑**	15 237 675	12 025 803	**30 915 721↑**	438 002 437	2 726 612	**329 101 595 ↑**
AFRICA TOTAL	356	521	**496 ↓**	14 978	22 330	**42 275 ↑**	78 474 223	21 596 732	**86 956 523↑**	617 776 000	1 103 541 105	**786 787 235**

(Source: EM-DAT: Member States' reporting on the SFDRR and PoA; -)

Not included in Table 7, is the global pandemic of the coronavirus COVID-19 that began in early 2020. As of August 2022, the African continent recorded near 11 800 000 confirmed cases, and almost 255 000 COVID-19 associated deaths (Table 8). Nearly 66 000 of these deaths occurred in 2020. The SADC, and then the UMA and Egypt recorded the most deaths in total, as well as per 100 000 people. However, these two regions also recorded significantly more tests than other RECs and it is therefore likely that other regions have more unreported deaths.

Table 8: REC COVID-19 associated deaths (2020-2022)

Region	Deaths	Deaths per 100 000 people	Tests per 100 000 people
EAC/IGAD	25 856	7	4 962
ECCAS	7 923	4	5 809
ECOWAS	11 021	3	3 508
NORTH AFRICA	83 642	39	11 114
SADC	131 666	35	10 941
Africa	254 526	18	7 379

(Source:Block Data: COVID-19 | African Union (au.int))

However, for any progress against all the SFDRR and PoA Targets to have value, it is also important to consider the changing disaster risk profile of the continent over the periods under investigation.

The risk index and contributing indexes for each region under investigation are therefore presented in the sections below for the three two-year periods from 2015-2020.

AFRICA DISASTER RISK PROFILE: INDEX FOR RISK MANAGEMENT (2015-2020)

For this report the Index for Risk Management (INFORM) **was used for baseline** information for determining vulnerability, hazards and exposure, lack of coping capacity and ultimately risk. INFORM is a joint initiative of the European Commission and the Inter-Agency Standing Committee Task Team (IASC) for Preparedness and Resilience, in partnership with many UN Agencies, donors, NGOs, and Member States. INFORM is also intended to support global policy processes, including:

- The Sendai Framework 2015-2030;
- The 17th Sustainable Development Goals adopted in UN Summit in September 2015;
- The 2016 World Humanitarian Summit;
- The 2017 Global Platform for Disaster Risk Reduction; and
- The resilience 'agenda', around which many organisations are focusing their humanitarian and development work.

The Index for Risk Management (INFORM) is a composite indicator that identifies countries at risk of humanitarian crises and disasters that would overwhelm national response capacity. The INFORM model is based on risk concepts published in scientific literature and envisages three dimensions of risk: Hazards and exposure; Vulnerability; and Lack of coping capacity. The INFORM model is split into different categories and levels using 54 core indicators to provide a quick overview of the underlying factors leading to risk. The INFORM model uses a linear 5-point Likert type scale which are linked to a specific qualitative "class" (very low, low, medium, high, very high). These in turn are linked to a quantitative scale giving the minimum and maximum value of the qualitative quantifier (see Figure 2 below). Using the INFORM model in this report allows for the creation of a benchmark against which the current report can be measured.

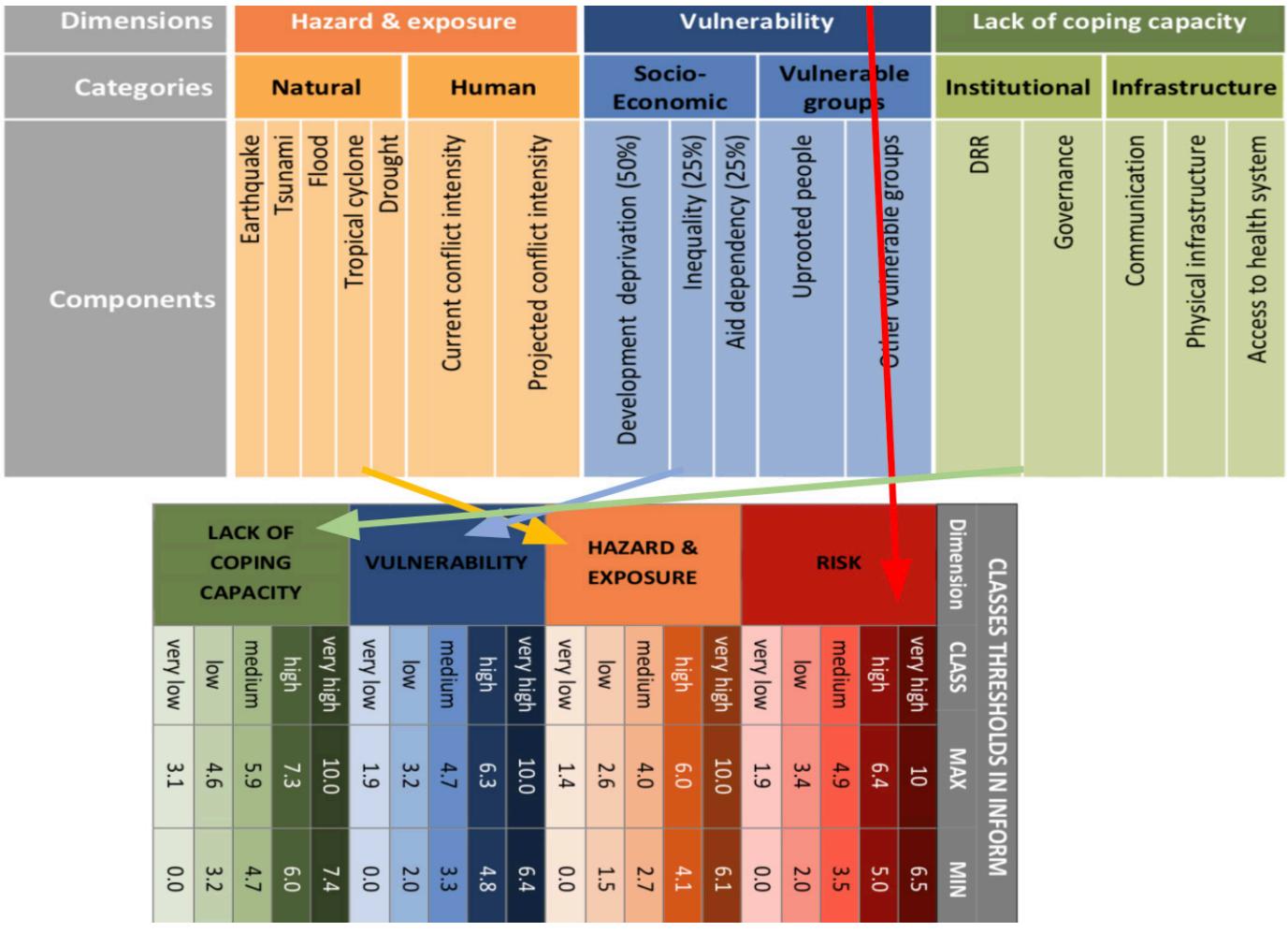


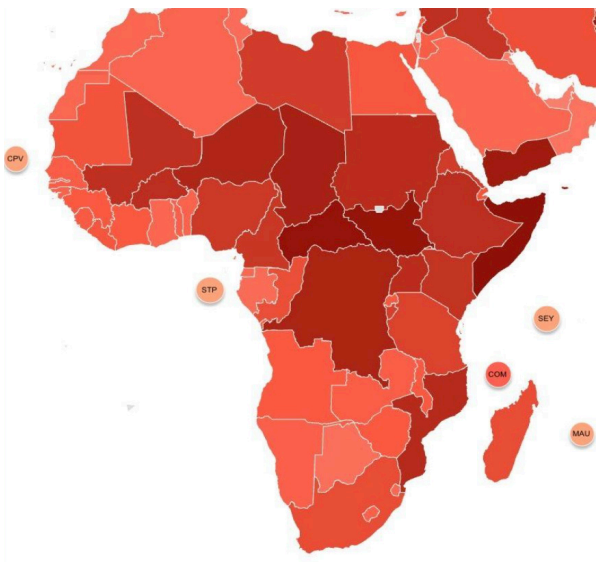
Figure 2: INFORM Model and classes thresholds.

1.1 INFORM RISK INDEX (2015-2020)

The INFORM risk index combines hazard and exposure, vulnerability, and lack of coping capacity (see Figure 3). The first index to be elaborated on is the INFORM Risk Index. Overall, the continent's risk index has remained the same, with a score of 5.1. between the end of the current reporting cycle, 2019-2020 and the previous cycle, 2017-2018. Consequently, it can be said that the risk index of the continent remains high according to the classification of the INFORM index. MS identified that climate change, rapid urbanisation, political instability and Covid-19 have played the biggest role in the high overall risk score attained by the continent. Although the overall risk index for the continent remained high during the reporting cycle, regions showed slight improvement. Specifically, between the 2017-2018 and 2019-2020 reporting cycles, ECCAS (-0.4), ECOWAS (-0.4) and SADC (-0.1) all recorded minor decreases. MS in these regions has indicated that some factors contributing to reducing risk experience relate to introducing or improving Early warning systems (EWS) and enforcing disaster management policies and legislations that remove communities from risk-exposed areas. When incorporated efficiently, the combination of these two reduces the risk of communities being affected by disasters, subsequently reducing the overall risk profile. Furthermore, educational programmes implemented are another factor that impacts a community's risk, as a community is less at risk when they understand the implications of particular actors within a potential disaster situation. Despite these successes, some increases also occurred between the two most recent reporting cycles. In this instance, EAC (+0.2), IGAD (+0.3) and North Africa (+0.3) all experienced slight increases in the INFORM risk scores.

It is crucial to also view the INFORM risk index score for the continent through a longer temporal lens to indicate long-term risk trends on the continent. In this instance, the score of 5.1. attained for the two most recent reporting cycles remains higher than the score of 4.7 that was achieved at the end of the first reporting cycle in 2016. Worryingly, the risk index has increased for all RECs between 2015/2016 and 2019/2020, with EAC (+0.7) and IGAD (+0.9) showing the most significant increases between these reporting periods. In this context, the continental risk index is **trending upwards incrementally** with each reporting cycle.

Map 3 and Table 9: INFORM Risk Index (2015-2020)



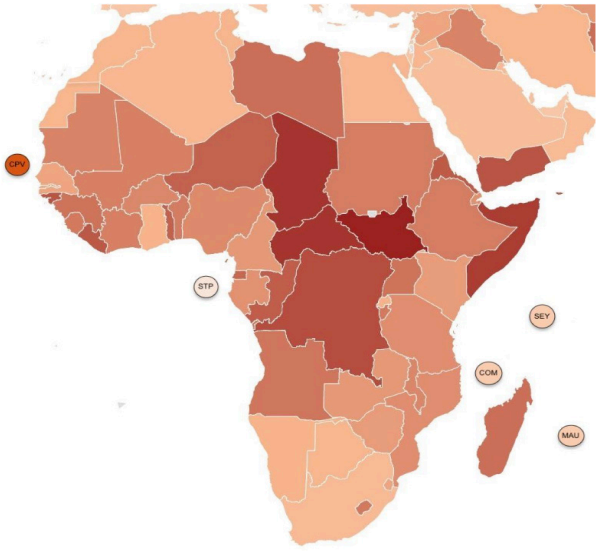
REC	2015	2016	2017	2018	2019	2020
EAC	5.1	5.1	6.0	5.7	5.6	5.8
ECCAS	3.2	4.9	5.4	5.4	4.9	5.0
ECOWAS	4.5	4.4	4.9	5.0	4.7	4.6
IGAD	5.5	5.5	6.1	6.1	6.4	6.4
SADC	4.2	4.0	4.3	4.4	4.1	4.3
UMA and North Africa	4.4	4.4	4.4	4.4	4.8	4.7
Africa	**4.4**	**4.7**	**5.1**	**5.1**	**5.0**	**5.1**

1.2 HAZARDS AND EXPOSURE INDEX (2015-2020)

The second index to be elaborated on is the INFORM Hazards and Exposure Index. Overall, the continent's hazard and exposure index has decreased from a score of 4.7 at the end of the 2017/2018 reporting cycle to 4.2 at the end of the 2019-2020 cycle. Although this improvement is commendable, the score of 4.2. attained by the continent is still considered high within the INFORM scoring matrix, and more improvement is needed. During the 2019-2020 reporting cycle, a positive downward trend emerged in most regions, reporting a decrease in hazard and exposure scores. In this instance, the ECCAS (-1.7) region made the most significant strides in reducing its hazard and exposure index, moving from a high to a medium hazard exposure score by the end of the reporting cycle. EAC (-1.3), IGAD (- 0,7) and SADC (-0.5) also achieved decreases in their Hazard and Exposure scores during 2019/2020. Only North Africa indicated an increase from 4.8 to 5.6 in their risk score for 2019/2020. MS in regions that have shown improvement have indicated that the improvement can be ascribed to the improvement in the number of multi-hazard early warning systems (MHEWS) (from 62 in 2017-2018 to 81 in 2019-2020) accompanied by improvements in disaster preparedness planning.

Looking at the longer-term trend in Hazard and Exposure since the first reporting cycle in 2015/2016, scoring remained consistent, with a score of 4.2 achieved at the end of 2015/2016 and 2019/2020. In this context, the Hazard and Exposure index of the continent is trending towards stability and not increasing or decreasing above the average score of 4 each reporting cycle. However, this score is still considered equal to a high level of hazard and exposure, and efforts should be made lower the score even further during subsequent reporting cycles. Since the first reporting cycle, the regions that have shown a decrease in their Hazard and Exposure scores are EAC (- 0.5), ECCAS (-1.2) and IGAD (-0.1). Whilst ECOWAS (+0.8), SADC (+0.1) and North Africa (+0.1) all experienced increases in their Hazard and Exposure index scores.

Map 4 and Table 10: Hazards and Exposure Index (2015-2020)



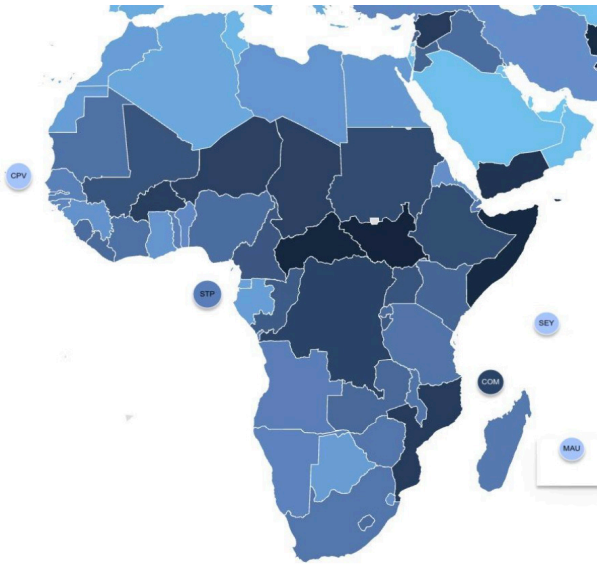
REC	2015	2016	2017	2018	2019	2020
EAC	4.9	4.8	5.9	5.6	4.3	4.3
ECCAS	3.3	4.8	5.1	5.1	3.6	3.6
ECOWAS	2.7	2.7	3.6	3.7	3.2	3.5
IGAD	5.7	5.5	6.2	6.1	5.6	5.4
SADC	2.9	2.8	3.2	3.4	2.7	2.9
UMA and North Africa	4.7	4.6	4.6	4.8	5.6	5.6
Africa	4.0	4.2	4.7	4.7	4.1	4.2

1.3 VULNERABILITY INDEX (2015-2020)

The vulnerability index comprises two categories, namely socio-economic factors and vulnerable groups. Between 2017/2018 and 2019/2020, the continental vulnerability index score increased slightly from 5.3 to 5.5. Accordingly, the continent's overall vulnerability index score remains high per the INFORM scoring matrix. There is also a slight upward trend in the vulnerability index score amongst the RECs, with EAC, ECCAS, IGAD, North Africa and SADC all recording increases between 0.1 and 0.3. The increase in vulnerability scores was largely attributed by MS to the impact of the COVID-19 pandemic, rapid urbanisation and slow recovery from past disaster events. ECOWAS maintained its score of 5.2 from the previous reporting cycle. While stable during reporting periods, the vulnerability index in every region remains unacceptably high. It should be noted that only North Africa has attained a medium vulnerability classification according to the INFOM index.

The longer-term view of the vulnerability index for the continent is equally poor. Since 2015-2016 all regions bar ECOWAS have been showing small increases in their Vulnerability Index Score. Although these are minor increases it contributes to an **incremental trend upward** relating to vulnerability on the continent since 2015/2016.

Map 6 Table 11: Vulnerability Index (2015-2020)



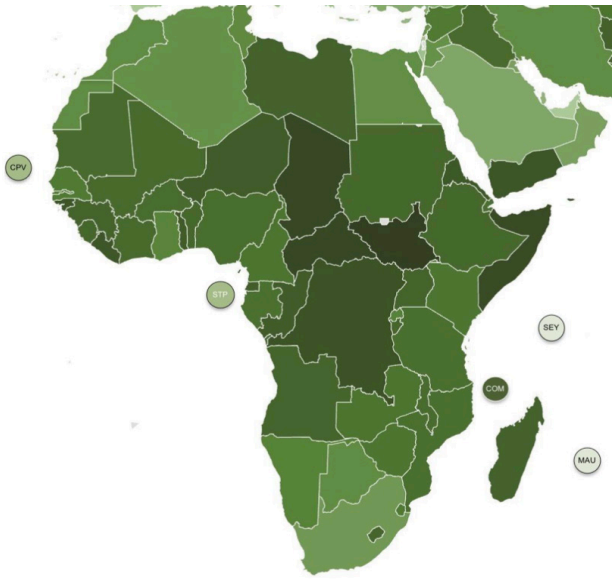
REC	2015	2016	2017	2018	2019	2020
EAC	6.5	6.7	6.6	6.6	6.5	6.7
ECCAS	5.8	5.5	5.4	5.5	5.8	5.9
ECOWAS	5.5	5.5	5.3	5.2	5.2	5.2
IGAD	6.6	6.7	6.8	6.8	6.6	6.8
SADC	4.8	4.8	4.5	4.6	4.7	5.0
UMA and North Africa	3.6	3.5	3.5	3.5	3.8	3.7
Africa	**5.4**	**5.4**	**5.3**	**5.3**	**5.4**	**5.5**

1.4 LACK OF COPING CAPACITY INDEX (2015-2020)

The lack of coping capacity index consists of two dimensions, institutional and infrastructure, and it measures the ability of the country's government to cope with disasters and the contribution of the existing infrastructure to reducing disaster risk. As with the vulnerability index, the lack of coping capacity index appears to be stable for the continent with the score only changing by 0.1 from 2017/2018 to 2019/2020. Most regions including EAC, ECCAS, ECOWAS and IGAD scored high scores relating to their lack of coping capacity during the 2019/2020 reporting period. SADC and North Africa received medium scores relating to their coping capacity scores. it is clear that during 2019/2020 there was a general lack of capacity on the continent to enhance disaster response, recovery and planning efforts that could lessen the impact of disasters. Member states have identified that an increase in lack of coping capacity could be ascribed to factors such as increases in levels of poverty, slow recovery from previous disaster events and instability brought about by civil and political conflict. Furthermore, natural phenomena were also stated as being a factor, including droughts, irregular precipitation, and the inverse such as flooding and severe storms. These natural phenomena are all exacerbating factors impacting the previously mentioned factors such as poverty and recovery time.

Although the short-term picture of the lack of coping capacity index is a cause for concern, the longer-term picture since 2015/2016 is slightly better. In this instance, all REC have indicated an improvement in their coping capacity index score ranging from 0.1 -0.5. These improvements have led to certain regions, such as SADC, being able to make progress from a high lack of coping capacity in 2015/2016 to a medium lack of coping capacity in 2019/2020. The experience and steps taken by SADC can serve as a best practice example for other Regions. In this context, the lack of coping capacity index of the continent is **trending slightly downwards.** However, it should be noted that although improvement has occurred most of the scores by RECs is still indicative of high levels of lack of capacity to respond to, recover from and build resilience to disasters on the continent.

Map 7 and Table 12: Lack of Coping Capacity Index (2015-2020)



REC	2015	2016	2017	2018	2019	2020
EAC	7.1	7.0	6.9	7.0	7.0	7.0
ECCAS	7.2	7.0	6.9	6.9	7.0	7.0
ECOWAS	7.1	6.8	6.7	6.6	6.6	6.6
IGAD	7.6	7.5	7.5	7.4	7.4	7.3
SADC	6.2	6.1	5.8	5.8	5.9	5.9
UMA and North Africa	5.4	5.4	5.4	5.2	5.4	5.3
Africa	**6.7**	**6.6**	**6.5**	**6.4**	**6.5**	**6.5**

02

CHAPTER 2:

PROGRESS IN ACHIEVING DRR PRIORITIES

INTRODUCTION

Since the first Biennial Report, the AUC has made significant strides in the implementation of the DRR priorities as well as the PoA, including programmes such as the Strengthening Disaster Risk Governance for Resilience in Africa Regions and Countries programme; the Sahel Resilience Project; Disaster Risk Reduction in West Africa and the Sahel Region: a Review in Progress; as well as a COVID-19 recovery framework for the continent. These programmes from the AUC further strengthens the progress of achieving the goal of having a more resilient continent. Regionally, varying progress have been made by the REC's in disaster risk management (DRM) across the four key SFDRR priorities. These include understanding disaster risk, strengthening disaster risk governance, investing in disaster risk reduction for resilience, and enhancing disaster preparedness for effective response.

To understand disaster risk, regions have conducted hazard profiling, risk and vulnerability analyses, and established legal frameworks and strategies to manage disaster risks. Universities and academic institutions have played a crucial role in enhancing knowledge sharing through research, knowledge management, and innovation. Collaborations with organisations like the Global Facility for Disaster Reduction and Recovery (GFDRR) have led to regular training targeting relevant sectors.

In terms of strengthening disaster risk governance, regions have developed DRM strategies, policies, frameworks, and institutional arrangements, with a focus on mainstreaming DRM into national development plans and budgets. High-level ministerial committees, parliamentary caucuses, and multi-sectoral platforms have been established to facilitate effective DRR implementation.

Investing in disaster risk reduction for resilience has varied across regions, with some countries allocating resources for DRR implementation and exploring risk transfer options such as the African Risk Capacity insurance mechanism. SADC has integrated DRR into its Climate Change Strategy and is assisting in developing programmes and projects that integrate climate change, early warning, and resilience-building activities. ECOWAS countries have invested in DRR, with initiatives like emergency funds, national social protection policies, and flagship programs for constructing dams to mitigate the effects of floods and droughts.

To enhance disaster preparedness for effective response, regions have developed early warning systems, contingency plans, and response capacities and conducted regular training and simulation exercises. SADC has established the Humanitarian and Emergency Centre (SHOC) in Nacala, Mozambique, while ECOWAS countries have updated national and communal contingency plans and hydroclimatic alert systems. EAC countries have implemented various early warning systems, with regular training drills and exercises to test their response plans.

Despite progress, challenges remain across regions, including limited resources, lack of inter-regional coordination, insufficient investment in disaster risk financing, and the absence of legislation for implementing international agendas. Nevertheless, many Member States and Regional Economic Communities (RECs) have been able to implement critical projects and address disaster risks that align with the four SFDRR priorities.

1

2.1 PRIORITY 1: UNDERSTANDING DISASTER RISK

Although much progress has been made, the SADC region faces challenges in developing concrete protocols and mechanisms for knowledge sharing among its MS. However, universities and academic institutions are important in enhancing knowledge sharing through research, knowledge management, and innovation. Baseline assessments were conducted during the 2019-2020 reporting period for the SADC region, but not all countries have completed them. Challenges in the SADC region include mainstreaming DRM into sector plans and budgets to promote proactive approaches instead of reactive ones. To address this, the SADC is working to assist MS in developing DRM guidelines for various sectors and planning to develop training modules.

The ECOWAS region has made some progress in adapting their national policies and strategies to be more risk-informed. For instance, the Gambia's updated DRR Strategy and Hazard Profile, Sierra Leone's Plan for Disaster Preparedness and Response, and the Government's National Platform for Risk Reduction and Disaster Management are cited as examples of countries taking specific actions such as hazard profiling, risk and vulnerability analysis, legal frameworks, early warning systems, and disaster management plans.

In the past decade, the North African region has struggled with a lack of procedures and mechanisms for knowledge sharing on disaster risk among MS. Despite this, some MS have conducted hazard mapping, risk and vulnerability analysis, and established legal frameworks and strategies to manage disaster risks.

In the ECCAS region, MS is advancing risk information studies through various projects, including hazard knowledge, vulnerability assessment, and risk analysis. A project in Cameroon, launched in 2020, aims to assess hazards, vulnerabilities, and risks in ECCAS MS, risk information packages were developed for different cultural, gender, and age groups, and coordination and multi-sectoral dialogue are promoted through various platforms and initiatives.

In the EAC and IGAD regions, the PoA supports DRR implementation at the regional level by encouraging the development of policies and strategies based on a sound understanding of disaster risk. Some MS have conducted knowledge sharing and hazard profiling in Uganda, Burundi, and Kenya. However, the need to enhance capacity and develop guidelines to mainstream DRM into school

curricula has been identified as a short-term need. Some MS have compiled flood risk mapping, risk communication, and damage and loss assessment. These regions continues to support DRR implementation at the country level by encouraging the development of policies and strategies based on a sound understanding of disaster risk. Knowledge sharing and hazard profiling have been conducted in the region, and the RECs collaborates with the Global Facility for Disaster Reduction and Recovery (GFDRR) and other stakeholders to conduct regular training targeting relevant sectors. Guidelines to mainstream DRM and CCA into school curricula have been developed. However, the region lacks a regional centre of excellence in DRR/M to advance risk science and knowledge.

2

2.2 PRIORITY 2: STRENGTHENING DISASTER RISK GOVERNANCE TO MANAGE DISASTER RISK

SADC actively supports Member States in developing disaster risk management (DRM) governance instruments and strategies. SADC's DRR unit plays a vital role in convening DRM Ministerial and Technical Committee meetings. It provides strategic guidance on implementing the SFDRR through a number of regional projects supported by international cooperating partners. Additionally, SADC offers training on the SFDRR and regional preparedness and response mechanisms to MS. SADC focuses on advocating for the development of DRM legislative frameworks with provisions for national and local level DRM structures, supporting efforts to mainstream DRM into national development plans and budgets, aligning DRM strategies at all levels of governance, strengthening disaster risk financing, and improving DRM/R strategic provisions and mainstreaming of DRR. Although not all MS have developed strategies that align with the SFDRR, SADC has implemented several programs to support MS, such as disaster preparedness and response, vulnerability assessments (RVACs), seasonal disaster preparedness, and mainstreaming of DRR. SADC plans to strengthen the regional DRR platform in the coming years, involving MS, international cooperation partners, academia, and the private sector. The region has conducted research into cross-border risk management and multi-national incident management systems. Guidelines have been developed for the transport sector to manage the cross-border spread of COVID-19. The SADC Humanitarian and Emergency Centre (SHOC) will increasingly play a more active role in disaster risk governance issues across the region.

The ECOWAS region prioritised developing DRR strategies, policies, frameworks, and institutional arrangements across its member countries. Burkina Faso has integrated DRR elements into its national development plan, climate change policy, and Poverty Reduction Strategy Papers (PRSPs). Côte d'Ivoire has a national DRR strategy but lacks an effective local-level mechanism. The Gambia's National Disaster Management Agency is decentralized up to the village level. The country, with the support of the AUC, developed a national policy and action plan for disaster and climate risk management. Ghana has an established National Disaster Management Organization (NADMO) responsible for DRR at all government levels. Guinea-Bissau has initiated the formation of a national multi-sectoral platform on DRR with appropriate legal frameworks and budgetary allocations. However, DRR activities are not prioritised at national and local levels. Liberia's National Disaster Management Agency (NDMA) has developed numerous policy documents, including the NDMA Four-Year Action Plan, National Early Warning and Emergency Operations Center Standard Operating Procedure (NEWEOCSOP), and Gender Policy on DRR in 2019. DRR is integrated into Liberia's national development plan.

The North African region has experienced varying levels of progress in DRR across its member countries. Algeria has decentralised DRR to provinces (Wilaya) and municipalities (Baladia) with ongoing updates to its national and local strategies. Mauritania has developed a national DRR strategy that requires adoption, and a DRR law is in progress, with

a decree to establish a national DRR platform. Morocco is in the process of validating its draft National Strategy for DRM (2020-2030), which includes setting up a National Risk Management Office (BNGR), developing an integrated risk management strategy, establishing an information and risk management system (SIGR), and creating a risk center of excellence (CER). Tunisia is actively developing its national DRR strategy, with local strategies in the works for the municipalities of Ain Drahem and Tataouine.

ECCAS has established structures and mechanisms for coordinating DRR, including the Cell in charge of DRM and Adaptation to Climate Change. The region has also strengthened the regional mechanism for exchanging risk management information with the establishment of the Centre of Applications and Climate Forecast of Central Africa (CAPC-AC) based in Douala. Additionally, ECCAS has developed an Action Plan for the implementation of the Sendai Framework 2015-2020 in Central Africa and the Yaoundé Action Plan for Preparation and Response to Disaster Preparedness in Central Africa 2015-2017. The region offers guidance on linking DRR and development strategies at national and sub-national levels and has established a regional multi-hazard early warning system to support national Early Warning Systems.

The EAC and IGAD regions aim to strengthen disaster risk governance by mainstreaming DRR into various sectors and enhancing institutional architecture for efficient DRR implementation. While the EAC has developed an action plan aligned with the Sendai Framework and the PoA, the overall implementation has been slow due to the low prioritisation of DRR among its member countries. High-level ministerial committees and parliamentary caucuses for DRM have been established in the EAC, but they face limitations due to inadequate human capacity and resources.
EAC and IGAD have made progress in implementing DRR priorities at the sub-regional level, with high-level ministerial committees for DRM established in both RECs. DRM policies and strategies have been developed to guide DRR implementation, and has aligned its regional DRM strategy with the Sendai Framework and the PoA for Implementation of DRR.

3

2.3 PRIORITY 3: INVESTING IN DISASTER RISK REDUCTION FOR RESILIENCE

The SADC Region developed a Regional Resilience Framework 2020-2030, which aims to provide a broader context for resilience building in SADC and MS. This strategy was adopted in early 2021 with implementation underway. SADC has recognised the importance of integrating DRR into developmental and climate change planning. The REC is working to support the development of responsive DRM strategies, promote informed investment in disaster preparedness and early warning systems, provide training for preparedness and response, test disaster preparedness mechanisms through simulation exercises and drills, and conduct research on risk transfer options and services. Additionally, SADC has made progress in integrating DRR into the 2020 Climate Change Strategy for the region and is assisting in the development of programs and projects that integrate climate change, early warning, and resilience-building activities.

Within the ECOWAS region, countries like Benin have established emergency funds for DRR, while Burkina Faso has participated in the African risk capacity insurance since 2016 and implemented a national social protection policy. Cabo Verde has set up a Special Emergency Fund for disaster response but has little budgetary support for DRR. Ghana's government has allocated funds for DRR implementation at various levels and initiated flagship programs to construct dams to mitigate the effects of floods and droughts. In Liberia, the National Disaster Management Agency (NDMA) is collaborating with UN agencies and NGOs to develop and implement DRR plans and programs, but there remains a funding gaps.

In the North African region, Algeria has made progress in DRR by investing in flood protection measures in major cities like Algiers and Sidi Bel Abbes. However, there is little to no data available for other member countries,

including Egypt, Libya, Mauritania, Morocco, Sahrawi Republic, and Tunisia. ECCAS has not made substantial investments in DRR, however, Cameroon has committed to joining the African Risk Capacity, an insurance mechanism established by the African Union in 2012 and is exploring additional sources of financing through the renegotiation of quotas for various premiums and penalties arising from risk-providing activities.

In the EAC and IGAD regions, MS, such as Uganda, Rwanda, Kenya, and Tanzania, have allocated resources for DRR implementation, with dedicated personnel running national disaster offices. The EAC Secretariat envisions investing in DRR for resilience, promoting disaster risk transfer and insurance, strengthening inclusive social safety nets, and integrating DRR into sectors and financial instruments such as health, tourism, commerce, industry, agriculture, water and sanitation, urban planning, construction, and buildings.

4

2.4 PRIORITY 4: ENHANCING DISASTER PREPAREDNESS FOR EFFECTIVE RESPONSE AND TO "BUILD BACK BETTER" IN RECOVERY, REHABILITATION AND RECONSTRUCTION

SADC has made strides in developing inter-regional early warning systems (EWS) by establishing a Climate Service Centre and implementing protocols like the Regional Strategy on Plant Health and the Regional Migrant Policy. Despite these advances, challenges remain, such as limited resources, lack of information flow protocol across sectors, and fragmented efforts in EWS development. SADC has also established the SHOC in Nacala, Mozambique, to enhance regional DRR, humanitarian response, and emergency capacity.

In ECOWAS, countries have made progress in disaster preparedness and response planning. Benin, Burkina Faso, Cabo Verde, and The Gambia have all developed and updated their national and communal contingency plans, as well as hydroclimatic alert systems. Ghana has created a National DRR Strategy, focusing on five priority areas, including institutional and legislative frameworks, the resilience of critical infrastructure, early warning systems, land use planning, and community and government capacity building. Other countries like Guinea-Bissau, Mali, Niger, and Nigeria have made progress in developing and implementing emergency response plans and EWS, although information on the progress of Sierra Leone and Togo is limited.

Within the Northern Africa region, Algeria, Mauritania, Morocco, and Tunisia have developed and revised multi-hazard contingency plans, with Algeria and Tunisia conducting periodic simulation exercises to test their preparedness. ECCAS has facilitated joint disaster preparedness and response interventions through National Platforms for DRR, collaborating with international partners to strengthen national post-disaster response management capacities. The region has supported capacity enhancement in early warning systems through workshops on Post Disaster Needs Assessment (PDNA) and Disaster Recovery Framework (DRF). However, challenges include the lack of inter-regional coordination, insufficient investment in disaster risk financing, and the absence of legislation for implementing the international agenda.

EAC and IGAD have made limited progress at the regional level, but individual countries like Burundi, Kenya, Rwanda, South Sudan, Tanzania, and Uganda have developed and updated their contingency plans, early warning systems, and response capacities. Each country has implemented various EWS, such as the Volcanological Observatory of Goma in the Democratic Republic of Congo and the Kenya Meteorological Department for EWS, with regular training drills and exercises conducted to test their response plans. Furthermore there has been focusing given on capacity building in damage and loss assessment through training on Post Disaster Needs Assessments (PDNA) and developing a framework for funding disasters. This approach aims to provide a regional pre-positioned resource to support early response to disasters and other calamities affecting MS.

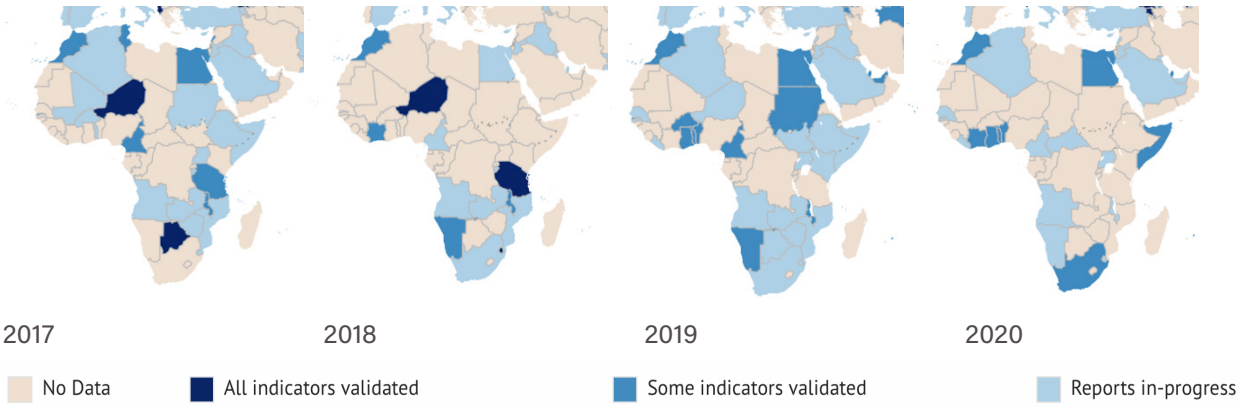
03

CHAPTER 3:

SFDRR TARGETS (2019-2020)

INTRODUCTION

Reporting on the SFDRR remains very low for African states (see Figure 6 below) despite several capacity development initiatives spearheaded by the UNDRR in this regard. There has, however been a slight increase in the number of member states utilising the Sendai Framework Monitoring (SFM) tool, an online reporting tool for governments to report their progress on DRR to report on DRR against the global targets of the Sendai Framework for DRR, in 2019. However, 2020 shows a decrease in the use of the SFM. Furthermore, there has been a decrease in participation on the AUC survey to gain valuable nuanced information from MS. This can mostly be ascribed to the COVID-19 pandemic which enjoyed priority. For the purpose of this research, the data from the SFM does not adequately cover all AU Member States and thus would not provide a conclusive benchmark against which progress can be measured.



Map 8: Evolution of the number of countries reporting in Africa in the online SFM tool from 2017 to 2020

(Source: https://sendaimonitor.undrr.org/) [The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Source: UN Geospatial.]

As can be expected, the COVID-19 pandemic has had a significant impact on achieving the SFDRR Targets. Although global COVID-19 statistics by the WHO indicate that the mortality rate in Africa was much less than in other world regions, it still had a significant impact on achieving the SFDRR Targets.

The main finding across all RECs is that Africa has made less progress in the period 2019-2020 than during the previous reporting period. Disaster mortalities (Target A) and people affected by disasters (Target B) are on the rise. This trend continues with Target C, as the data shows a significant increase from the previous reporting period to the 2019-2020 period. Damage to critical infrastructure (Target D) also increased for the period 2019-2020, where data was provided by MS. There has been a steady increase in Target E (DRR Strategies), which correlated with data from MS and RECs. From the biennial report, reporting on Target F (International Cooperation) has increased, yet more nuanced information is required from MS in this regard. Finally, there has been a steady increase in regional, national and sub-national early warning systems (Target G).

A 3.1 SFDRR TARGET A: Reduce disaster mortality

The SFDRR Target A aims to substantially reduce global disaster mortality by 2030, aiming to lower the average per 100,000 global mortality rate in the decade 2020–2030 compared to the period 2005– 2015.

MS reported an increase in disaster mortality from 22 330 for 2017-2018, with an increase to 42 275 for 2019-2020. The main cause of death was mostly flooding in the EAC and ECCAS regions. Tropical cyclones such as Kenneth and Idai in SADC also contributed to the loss of life. Epidemic disease outbreaks such as Ebola also caused several mortalities in the ECCAS region. Covid-19 affected the entire continent and caused 63,334 deaths by the end of 2020. It should be noted that of the **63 344 COVID-19** deaths recorded by the Africa CDC from February to December 2020, very few member states included their COVID-19 casualties in their disaster casualty reporting. This means the number of deaths due to disasters could be higher for 2019-2020.

Table 13: Disaster mortalities per REC (2015-2020)

REC	No. mortalities		
	2015-2016	2017-2018	2019-2020
IGAD	1306	1941	5904↑
EAC	2297	1579	5664↑
ECOWAS	2726	2433	3460↑
ECCAS	1 296	3 456	5 933↑
North Africa	4460	8242	1304↓
SADC	2 893	4679	20 010↑
Africa Total	14 978	22 330	42 275 ↑

(Source: Member States' reporting on the SFDRR and PoA, reports submitted by MS to AUC; EM-DAT: Emergency Events Database – *Université catholique de Louvain* (UCLouvain))

It should also be noted that direct deaths due to drought have not been accurately recorded, which might impact these figures if such losses can be determined. The longitudinal and creeping nature of drought events makes such direct linkages to mortality somewhat problematic. MS does not readily attribute deaths to a specific drought disaster, and the knock-on effects of droughts (e.g. food insecurity, epidemics, health problems) causing deaths are not well reported on. Much better reporting on drought mortalities is needed. The analysis of disaster mortalities is only as effective as the data available. The losses reported show a small percentage of what the actual data could be due to the lack of reporting from the MS. With the data reported, the general losses did increase, and one big disaster in any given year will significantly skew the analysis. The challenge with this indicator is obtaining as accurate data from MS and other partner organisations as possible. It is recommended that more accurate and disaggregated statistics of deaths associated with disasters in MS be recorded annually using established tools such as DesInventar.

During 2019-2020, the continent **did not achieve SFDRR Target A**.

B 3.2 SFDRR TARGET B: Reduce the number of affected people

Target B of the SFDRR requires MS to substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 in the decade 2020-2030 compared to the period 2005-2015. The number of **People Affected by disasters increased significantly from** 21 596 732 in 2017-2018 **to 86 956 523** for 2019-2020. IGAD, EAC, ECOWAS and SADC all indicated a significant increase in people affected by disasters. Both ECCAS and North Africa decreased in number of affected from the previous reporting period.

Table 14: Number of affected per REC (2015-2020)

REC		No. affected	
	2015-2016	2017-2018	2019-2020
IGAD	26 850 950	1 425 779	27 637 946 ↑
EAC	3 230 471	1 502 846	8 833 251↑
ECCAS	331 759	3 449 104	2 811 020↓
ECOWAS	3 162 466	2 591 132	15 051 015↑
North Africa	860 902	6 020 685	1 707 029↓
SADC	7 646 321	5 680 930	30 91 6262↑
Africa Total	49 674 223	21 596 732	86 956 523↑

(Source: Member States' reporting on the SFDRR and PoA, reports submitted by MS to AUC; EM-DAT: Emergency Events Database – *Université catholique de Louvain* (UCLouvain))

- The following disaster events increased the Number of people affected by disasters:
  - **Droughts** in SADC, EAC and IGAD affected 26 million people. It should be noted that there were several other smaller droughts throughout the continent during the 2019-2020 reporting cycle that contributed to making droughts the disaster that affects most Africans.
  - **Storms**, including tropical Cyclone Idai and Kenneth (March-April 2019) also affected 4.5 million people in SADC.
  - **Flooding** in March and May 2020 affected approximately 700 000 persons in ECCAS and EAC.
  - Finally, **Covid-19** (February 2020) affected approximately 2.6 million people in Africa by the end of 2020.

As with disaster mortalities, a commonly observed problem by MS is that there is often not good coordination among the different state and non-state actors in recording the number of affected populations. Consequently, different

figures on how many people were affected by disasters can be attained for a country during a specific year. RECs, with the assistance of international cooperating partners and MS must establish a uniform mechanism for the recording of disaster statistics or aligning data to decrease confusion. During 2019-2020 the continent **did not achieve SFDRR Target B**.

C 3.3 SFDRR TARGET C: Reduce direct disaster economic loss

SFDRR Target C requires MS to reduce direct disaster economic loss in relation to the global gross domestic product (GDP) by 2030. Over the past two years, there has been a substantial decrease in overall reported direct economic losses in Africa from **1 103 541 105** in 2017-2018 to **786 787 235** 2019-2020

Table 15: Total monetary damage caused by disaster per region.

REGION	Total monetary damage caused by disaster per region		
	2015-2016	2017-2018	2019-2020
SADC	492 515 000	2 536 612	329 101 595↑
ECOWAS	85 321 000	368 259 000	185 000 000↓
EAC	9 552 000	583 047	22 929 570 ↑
IGAD	10 358 000	644 162 446	199 423 070↓
ECCAS	13 000	52 000 000	50 333 000↓
NORTH AFRICA	20 017 000	36 000 000	NDR
AFRICA TOTAL	**617 776 000**	**1 103 541 105**	786 787 235↓

Some of the most significant monetary losses inflicted on MS were caused by the following disaster events:

Droughts in IGAD and EAC (starting April 2019) inflicted US$ 2 826 910 in monetary losses.

Storms, including tropical Cyclone Idai and Kenneth (March-April 2019) inflicted approximately US$ 230 000 000 in monetary losses in SADC.

Flooding in ECCAS and EAC during March and May 2020 inflicted approximately US$ 4 401 990 in damages. ECOWAS also sustained US$ 100 000 000 in monetary losses due to flooding in August and October 2019.

(Source: Member States' reporting on the SFDRR and PoA, reports submitted by MS to AUC; EM-DAT: Emergency Events Database – *Université catholique de Louvain* (UCLouvain))

Interestingly, the direct economic losses recorded to transportation and industrial accidents have been poorly recorded. The heightened increase in these incidents on the continent over the past four years warrants a question regarding the economic losses associated with such incidents. The lack of data on this composite disaster shows a lack of coordination between national disaster risk management structures and other sectors, such as transportation. Similarly, the short-term and long-term economic losses due to epidemics are poorly defined and reported on. One of the challenges identified in the reporting on this target is delineating what constitutes direct economic loss across sectors. Although the SFDRR provides adequate guidance on this Target, Member States reported difficulties in obtaining complete data. Disasters (such as epidemics and transportation) do not allow for the once-off recording of massive losses. These losses are more associated with the aggregate loss linked to several disasters over a period of time. Additionally, MS and RECs poorly record direct disaster losses. Better coordinating mechanisms must be put in place, and it is suggested that MS and RECs make concerted efforts to establish linkages with their national research institutions and universities which can play a valuable role in gathering and managing such data on an ongoing basis. Most regions in Africa have several DRR-related centres in universities, which can be partnered with for the purpose of disaster data management.During 2019-2020, the continent **partially achieved SFDRR Target C.**

3.4 SFDRR TARGET D:

Reduce disaster damage to critical infrastructure and disruption of basic services

Target D of the SFDRR aims to substantially reduce disaster damage to critical infrastructure and disruption of basic services, including health and educational facilities, including developing their resilience by 2030.

Reporting by MS on the damage to critical infrastructure and disruption of basic services remains a challenge. Data is not readily available or quantified at national levels, with most of the losses sustained at local level. Though the previous reporting periods had a modicum of success in the amount of data reported on, this reporting period had a significant lack of reporting. Almost no information was given regarding the loss of critical infrastructure. Thus, no deduction can be made whether or not any progress has been made. Difficulties reporting on the target have been attributed to various factors, including a lack of capacity and knowledge in collecting and reporting data, lack of data sharing amongst government departments and inadequate disaster risk management structures within some countries.

Unprecedented urban flooding over decades in Algiers (capital of Algeria) lead to an innovative public investment in infrastructure to reduce flood disaster risk in the District of Bab El Oued. The main public infrastructure investment for flood disaster risk reduction was the increase of the capacity of the existing sewerage system of the district by the duplication of the collector of the Oued M'kacel. The new collector is composed of two parts: a tunnel part and an open sky part. The tunnel has 4 meters in diameter and is 4.4 km long and its depth varies between 30 and 54 meters. The open sky part consists of a double frame of size 2.40 x 4 meters and 270 meters long. This project was conceptualised and funded by budget allocated by the public authorities for disaster risk reduction to the value of US$75 million.

Table 16: Loss of critical infrastructure per REC (2015-2020): Some examples

REC / Member State	Disaster	2015-16	2017-18	2019-20
ECCAS				
1. Number of health facilities destroyed or damaged				
Cameroon	Flood	0	1↑	
	Landslide	0	4↑	
	Structural fire	0	20↑	
	Civil hazards	0	1↑	
Congo	Severe weather	1	0↓	
2. Number of educational facilities destroyed or damaged				
Cameroon	Flood	0	5↑	
Congo	Severe weather	2	4↑	
3. Number of transportation infrastructures destroyed or damaged				
Cameroon	Flood	1	0↓	
	Civil hazard	0	3↑	
Gabon	Sinkhole	0	1↑	

ECOWAS				
1. Number of health facilities destroyed or damaged				
Benin	Flood	0	51↑	
Côte d'Ivoire	Severe weather	2	0↓	
Liberia	Flood	1	1	2↑
	Structural fire	0	1↑	
Sierra Leone	Flood	15	25↑	
2. Number of educational facilities destroyed or damaged				
Benin	Flood	70	198↑	
Côte d'Ivoire	Severe weather	22	0↓	
Liberia	Flood	1	1	
	Severe weather	0	1↑	
Sierra Leone	Flood	21	36↑	
3. Number of transportation infrastructures destroyed or damaged				
Benin	Flood	0	18↑	
Côte d'Ivoire	Flood	1	2↑	
	Sinkhole	2	0↓	
Liberia	Flood	1	0↓	
	Coastal erosion	2	0↓	
Sierra Leone	Flood	12	18↑	
IGAD/EAC				
1. Number of health facilities destroyed or damaged				
Kenya	Flood	10	20↑	
	Landslide	30	40↑	
	Sinkhole	50	60↑	
	Drought	70	80↑	
2. Number of educational facilities destroyed or damaged				
Kenya	Flood	10	15↑	
	Landslide	10	15↑	
	Sinkhole	10	15↑	
	Drought	10	15↑	
3. Number of transportation infrastructures destroyed or damaged				
Kenya	Flood	5	25↑	
	Landslide	10	30↑	
	Sinkhole	15	35↑	
	Drought	20	40↑	
SADC				
1. Number of health facilities destroyed or damaged				
Angola	Severe weather	140	83	52↓
Lesotho	Severe weather	2	1↓	
Madagascar	Floods/cyclones	137	123↓	
Malawi	Flood	23	0↓	1↑
Mozambique	Flood	10	18↑	6↓
Zambia	Floods	3	1↓	
Zimbabwe	Flood/cyclone	0	53↑	294↑

2. Number of educational facilities destroyed or damaged				
Angola	Severe weather	71	260	243↓
Botswana	Earthquake	1	0↓	
	Flood	0	3↑	
Eswatini	Severe weather	68	9↓	
Lesotho	Severe weather	10	25↑	
Madagascar	Floods/cyclones	461	1114↑	
Malawi	Flood	626	18↓	8↓
Mozambique	Flood	110	42↓	1372↑
Zambia	Floods	63	15↓	721↑
Zimbabwe	Flood/cyclone	0	331↑	139↓
3. Number of transportation infrastructures destroyed or damaged				
Botswana	Flood	0	1↑	
	Cyclone	0	2↑	
Lesotho	Severe weather	45	250↑	
Madagascar	Floods/cyclones	1	32↑	
Malawi	Flood	1220,53km & 3210 meters bridges, drifts, culverts	0↓	221↑
Zimbabwe	Cyclone	2 bridges 10km roads	369 culverts and bridges↑	865 km of road and 20,354 metres of bridges

(Source: Member States' reporting on the SFDRR and PoA, reports submitted by MS to AUC)

The data recorded by MS only relates to the number of facilities destroyed or damaged. Very little other data on such losses is recorded for example: amount of school days lost; impact on supply chains and other business opportunities; or additional deaths and affected people through the loss of health facilities. Although it is useful to record the number of critical infrastructure loss, it is recommended that MS also draw correlations with the direct and indirect economic losses as per Target C of the SFDRR.

During 2019-2020, the continent **did not achieve SFDRR Target D**.

E 3.5 SFDRR TARGET E: Increase the number of countries with national and sub-national/local disaster risk reduction strategies

Target E aim to ensure the substantial increase in the number of countries with national and local disaster risk reduction strategies by 2020. During 2019-2020, 44 MS reported having disaster management strategies in place. This represents a marginal increase from the 40 countries that reported having strategies in 2017-2018. The development and adoption of local-level DRR strategies also improved slightly to 41% in 2019-2020 from 38% in 2017-2018.

Kenya has fully institutionalised DRR in the country with National Disaster Operations Centre (NDOC) fully dedicated to coordinate all aspects of disaster prevention, mitigation, preparedness and response in the country. It has a vibrant multi stakeholder national DRR platform that meets quarterly to share experiences and lessons on various DRR aspects. The DRR platform annually conducts a National DRR Symposium, which runs back-to-back with the IDRR day in the month of October. The various stakeholders are involved to show case their innovations and experiences and topical papers are presented relevant to the year's theme. Planning for the two events starts back in July to search for key speakers, solicit for relevant presentations and resources to fund the symposium and the IDRR day.

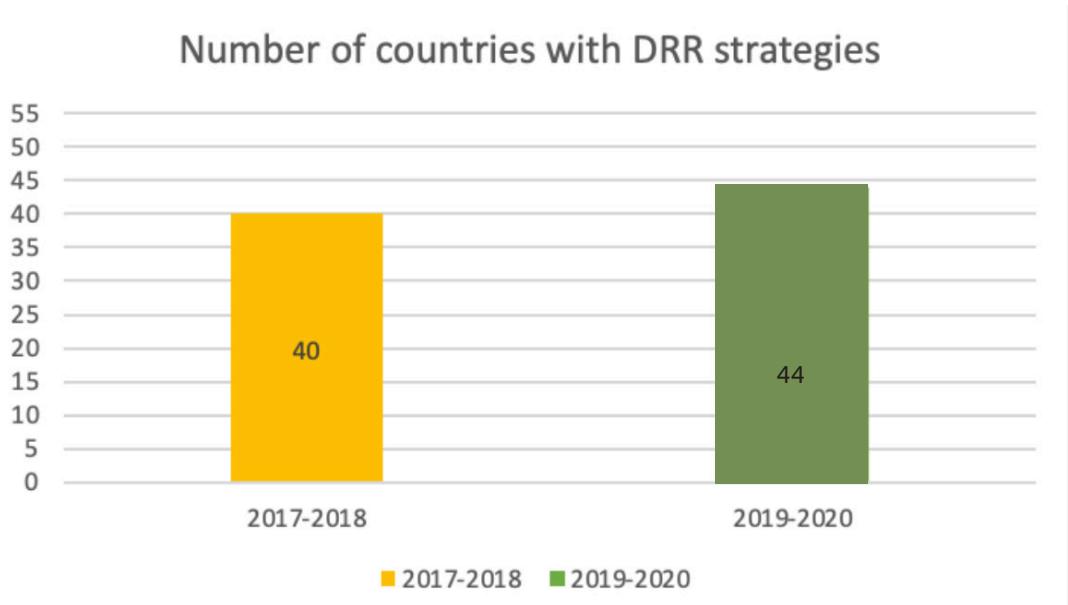


Figure 4. Number of Countries with DRR strategies

(Source: Member States' reporting on the SFDRR and PoA, reports submitted by MS to AUC)

Most of the post-2000 policies and strategies formulated by MS are aligned with the Hyogo Framework for Action, with an increasing number aligned with the SFDRR. MS reported that where policies and strategies are being revised, they are now aligned with the SFDRR and the PoA. Few countries have policies and strategies dating before the 1990s. Most of these are being revised.

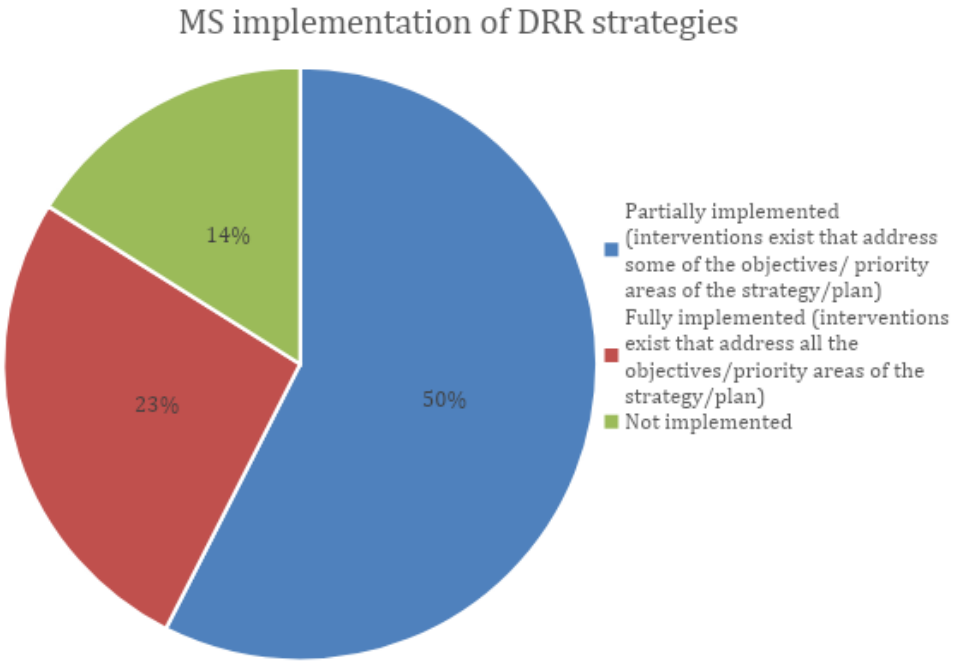


Figure 5: MS Implementation of their DRR Strategies (2019-2020)

(Source: Member States' reporting on the SFDRR and PoA, reports submitted by MS to AUC)

The previous reporting period stated a low full implementation percentage of 4.55%, a partial implementation of 77%, and 18.18% no implementation, and although the current percentages does seem to have improved drastically, several of the MS did not provide this information through the data collection tool, which makes it difficult to compare the progress accurately. In the future, all MS needs to report on this, as it will make a significant difference in the true rate of progress.

Table 17: DRR Strategies in place by end 2020

EAC	IGAD	UMA	SADC	ECOWAS	ECCAS
Burundi	Burundi	Algeria	Angola	Benin	Cameroon
DRC	Djibouti	Libya	Botswana	Burkina Faso	CAR
Kenya		Mauritania	Comoros	Cape Verde	Chad
Rwanda	Ethiopia	Morocco	DRC	Cote d'Ivoire	Congo
South Sudan	Kenya	Tunisia	Eswatini	Gambia	Equatorial Guinea
Tanzania	Rwanda		Lesotho	Ghana	Gabon
Uganda	Somalia		Madagascar	Guinea	
	South Sudan		Malawi	Guinea-Bissau	
	Sudan		Mauritius	Liberia	
	Tanzania		Mozambique	Mali	
	Uganda		Namibia	Niger	
			Seychelles	Nigeria	
			South Africa	Senegal	
			Tanzania	Sierra Leone	
			Zambia	Togo	
			Zimbabwe		

Yes | No | No data | Reported progress since 2018

(Source: Member States' reporting on the SFDRR and PoA, reports submitted by MS to AUC)

Note that the MS that did not provide any information in this regard, does make it more difficult to compare which MS did manage to develop and implement DRR strategies since 2018. An inference can be made that those that stated that they do have DRR strategies, still have said strategies in place. Somalia, Liberia, Cote d'Ivoire and Congo stated that they developed DRR strategies the first biennial report.

Table 18: Reported sub-national DRR Strategies (2019-2020)

Country	Total number of local governments 2019-2020	Number of local governments with adopted DRR strategies 2019-2020	% of local governments with adopted strategies
Benin	**77**	**45**	**58%**
Botswana	**32**	**9**	**28%**
Burkina Faso	**421**	**41**	**10%**
Burundi	**1**	**1**	**100%**
Chad	**23**	**4**	**17%**
Congo	**1**		**0%**

Country	Total number of local governments 2019-2020	Number of local governments with adopted DRR strategies 2019-2020	% of local governments with adopted strategies
Equatorial Guinea	8	0	0%
Eswatini	353	124	35%
Gabon	9	0	0%
Gambia	8	0	0%
Ghana	260	260	100%
Guinea-Bissau	9	0	0%
Kenya	47		0%
Lesotho	80	17	21%
Liberia	15	15	100%
Madagascar	22	6	27%
Malawi	35	35	100%
Mali	69	69	100%
Mozambique	151	53	35%
Namibia	71	27	38%
Niger	255	225	88%
Senegal	557	0	0%
Seychelles	5	1	20%
Sierra Leone	16	10	63%
South Africa	52	52	100%
Tanzania	196	31	15%
Togo	39	23	59%
Tunisia	350	17	5%
Zambia	107	12	11%
Zimbabwe	72	61	85%
Africa average			*41 %*

(Source: Member States' reporting)

Challenges reported on by MS are the lack of implementation of the national policies at national (cross-sectoral coordination and buy-in) and sub-national level, as well as funding support for the implementation of the policies and strategies. The AUC and appropriate RECs should make concerted efforts to support the MS who does not have national policies, laws and strategies for DRR in place yet, as this could be seen as not having achieved the 2020 target. It is recommended that funding tracking streams are created for tracking the funds which are allocated to DRR policy and strategy implementation at all spheres of government and that this is reported on annually.

During 2019-2020, the continent **did not achieve SFDRR Target E**

E

3.6 SFDRR TARGET F: Enhance international cooperation

SFDRR Target F aims to substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of the SFDRR by 2030. This was one of the best-performing targets, with all 55 MS reporting at least one or multiple cooperative partnerships. Most MS reported that they had established strong partnerships with international organisations and academia to advance the implementation of DRR activities in their countries. However, for 2019 MS reporting on the SFM indicated a significant decrease in international support received (from US$ 442 mil. to US$117 mil.), with 2020 having no data at all. Various best practice examples of international cooperation can be highlighted from the various RECs, for example: ***Burkina Faso*** highlighted the role and support by ECOWAS in capacity development for DRR. Mention was also made

of the Global Environment Facility and its support towards the integration of disaster risk reduction and climate change adaptation aspects in the country. ***Benin*** reported on the inter-state cooperation in DRR which it has with Cameroon, Morocco and Togo. ***Cote d'Ivoire*** highlighted the cooperation and support by ECOWAS, UNDP, UNDRR, the World Bank and the EU, for information management, awareness creation and capacity development. ***Cape Verde*** reported on the project: *"Building Capacities for Resilient Recovery - Phase 2 (2018-2022)"* with is funded by the Government of Luxembourg and UNDP. The project is designed to improve recovery preparedness, support effective recovery management and promote building back better. ***Ghana*** highlighted the "*Greater Accra Climate Resilient and Integrated Development Project*" funded by the World Bank as well as the support by GIZ in integration of risk transfer solutions into a holistic climate risk management approach for Ghana. The Norwegian Government also supports Ghana via funding and technical assistance. Liberia reported the involvement by the Japan International Cooperation Agency (JICA) which supports the four priority areas of the SFDRR and the PoA. JICA promotes the mainstreaming of DRR in every developmental project and support the development of a framework for DRR with other stakeholders. ***Sierra Leone*** is currently undergoing significant and profound changes in their national disaster risk management structures with the support of the World Bank, DFID and UNDP. Emphasis in this cooperation is placed on the creation of a new DRR Agency (draft Bill has already been developed), a recovery programme, multi-hazard assessment for resilient cities, compiling a national hazard profile, implementing schools programmes and ensuring public education. An example of sub-national cooperation was given by **Botswana** is working with external parties to further expand on the early warning system (including tv communication). ***Eswatini*** has agreements with the Government of Taiwan which provides in-kind support, and a proposal to the World Bank is in negotiation phase. ***Malawi*** reported on a significant number of international cooperation initiatives. One such agreement is a trilateral cooperation between Peoples' Republic of China, Republic of Malawi and United Nations Development Programme that was in place from 2016 to 2017. This initiative involved an agreement to implement a small grants scheme on DRR to contribute to disaster risk reduction and recovery among communities. It also involved the mainstreaming of DRR into policies, development plans and programmes, and collecting and making data and knowledge on the impact of natural disasters accessible to decision makers. The ***Seychelles*** highlighted the technical assistance provided to them by the World Bank for the development of its National Integrated Emergency Management Plan. Various cooperation with regional bodies were also recorded such as the Regional Vulnerability Assessment and Analysis programme of SADC which has assisted greatly in sub-national integration of vulnerability measures into development planning. ***Algeria*** has developed several international cooperation in DRR, mainly in capacity building, with UNDP, France, Italy, Japan, and China. ***Morocco*** developed international relations with JICA (Japan), Switzerland, as well as the OECD, while ***Tunisia*** has cooperation with UNDRR, UNDP, and EU (DG ECHO) in order to develop their national strategy on DRR and the plan of action. This cooperation also focusses on implementing local strategies for DRR at the municipalities of Ain Drahem and Tataouine (ongoing pilot projects). Furthermore, French-Tunisian cooperation between the Civil Protection (ONPC) and Priority Solidarity Fund (PSF), which has funded the development of the national analysis, exists.

It is clear from the brief analysis above that significant bi- and multi-lateral cooperation for DRR exists on the continent. However, cooperation can also be problematic. Some of the challenges mentioned by MS is that funding comes with certain conditions from the donors. Such conditions do not always fully align with the national priorities, and MS reported that they need to adhere to these conditions if funding is to be secured. MS highlighted the need for continued cooperation but felt that this Target can have a negative focus in assuming that developing countries always need assistance. Emphasis was placed on local technical skills, which can be much better utilised if funding is available. A distinction should thus be drawn between monetary and technical assistance.

During 2019-2020, the continent **achieved SFDRR Target F**

3.7 SFDRR TARGET G: Increase the availability of and access to multi-hazard early warning systems

In achieving Target G, MS will substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030. Between the 2017-2018 and the 2019-2020 reporting cycle, there has been significant growth in the availability MHEWS. The table below indicates that the number of MHEWS on the continent grew from 62 in 2017-2018 to 81 in 2019-2020. During the same period, single-hazard EWS increased from 49 to 50. Overall, 82,35% of MS reported having some form of single or multi-hazard early warning system(s) in place.

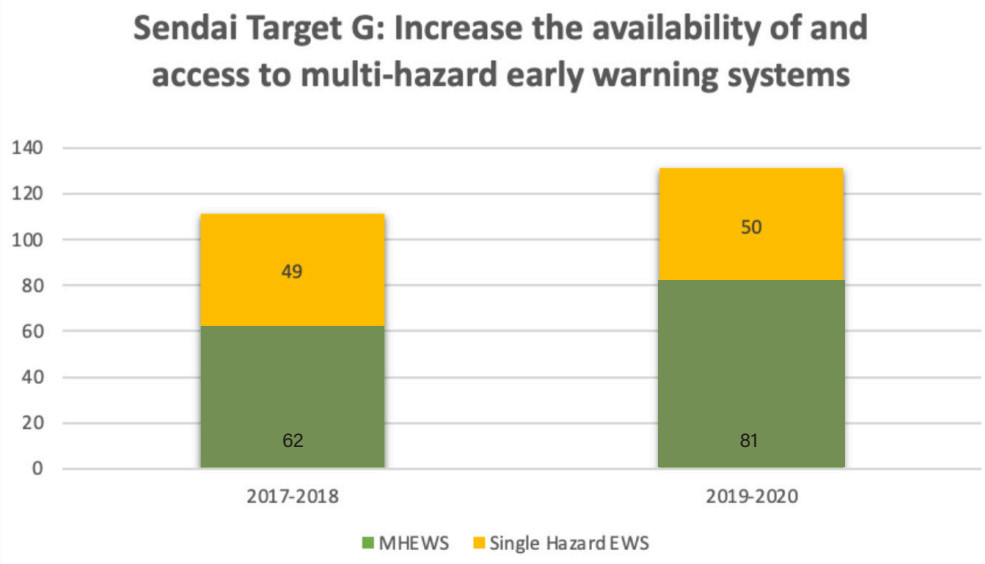


Figure 6: Increase in the availability of and access to multi-hazard early warning over reporting period.
(Member state reporting)

Although there has been significant improvement in the number of EWS on the continent several challenges persist. Issues such as the lack of systems integration, multiple early warning systems at various levels which are not coordinated, and national sovereignty issues about cross-border early warnings and systems still need to be resolved. The meteorological and hydrological services of MS seem to be the greatest sources of early warning information. Regions like IGAD and EAC have the IGAD Climate Prediction and Application Centre (ICPAC), which is advanced in the issuance of weather and climate early warnings. The Southern African Regional Climate Outlook Forum (SARCOF) is coordinated by the Southern African Development Community (SADC) Climate Services Centre (CSC) in Gaborone, Botswana. The SADC Climate Services Centre provides operational, regional services for monitoring and predicting extremes in climate condition. The Centre develops and disseminates meteorological, environmental and hydro-meteorological products. The Centre's products contribute to improved disaster risk management in the region and help to ensure Member States are better prepared for weather and climate disasters, conservation and protection of natural resources. The African Centre of Meteorological Application for Development (ACMAD) continues supporting Member States with meteorological data and warnings. Very little coordination and integration of early warning information between the various centres and agencies were reported on. It is suggested that the AUC, through the RECs implement measures to use better and integrate early warning systems. Data on the accessibility of these systems by the broader public is limited. Communication processes must be implemented to adequately communicate early warning information to those most in need of such information.

MS reported an increase in the development and implementation of Multi-Hazard Early Warning Systems (MHEWS). Most MS reported on the existence of two or more of such systems. However, These systems are very sector specific (see the example of the SADC region below). Concerns were raised on the lack of integration of such systems, and most MS believe that RECs need to play a more leading role in ensuring synergies in MHEWS and regional warnings. IGAD reported progress in developing a regional MHEWS, which might be operational before 2021. Furthermore, the IGAD region undertakes hazard and risk assessment using GIS and Earth Observation, and training for early warning is provided. Forecast-based early warning has been implemented in the region since 2014 when the IGAD DRM unit was moved to Kenya.

Table 19: Early warning systems: SADC example

Member State	Early warning systems in place	Existing (before 2016)	Focus	Number of people covered by multi-hazard EWS (G-3)
Angola	Yes	Yes	Multi-Hazard [Meteorology, Water Resources, Environment and Civil Protection and Fire]	35 215 3 stations: Cuvelai Baciun, Cavaco River, Coporolo River and Catumbela River. 15 Stations in the localities of Namacunde, Oihole, Evale, Ehafo, Oshimukua, Omuvandja, Katwe, Mupa, Mukolongodjo, Nauyala, Bentiaba, Bibala, Chiulo, Gambos, Oncocua
Botswana	SMS Mass Communication Early Warning	Since 2012	Multi-hazard	Whole population
	Severe Weather & Flood Warning	Since 2016	Multi-hazard	Whole population
Comoros	Karthala Volcano Observatory,	Yes	Volcanological and geophysical	Less than 50% of the population
	Weather Directorate	Yes	Hydrometerological eventss	-
	National Directorate of Health	Yes	Epidemiology	-
Congo Dem. Republic	Volcanological Observatory of Goma	Yes	N/A	N/A
	(Ovg), Seismological Center of Lwiro,	Yes	N/A	N/A
	National Institute for Biomedical Research (Inrb)	Yes	N/A	N/A
	Disease Management Branch (Ministry of Health)	Yes	N/A	N/A
	Humanitarian Watch (Ministries of Humanitarian Action) Metlsatt	Yes	N/A	N/A
Eswatini	Meteorology	Before 2016	Multi-hazard	Nationally
	Geology	Before 2016	Single hazard	Nationally
	Department of Water Affairs	Before 2016	Single hazard	Nationally
	Eswatini National Trust Commission	Before 2016	Single hazard	Nationally
	Ministry of Health	Before 2016	Multi- hazard (epidemics)	Nationally

Member State	Early warning systems in place	Existing (before 2016)	Focus	Number of people covered by multi-hazard EWS (G-3)
Lesotho	Global information and Early warning system	December 2017	[Single hazard]	1,800,000
	Climate risk analysis and EWS IMS	2015	Multi hazard	-
	Lesotho Meteorological services	Before 2016	Multi hazard	1,800,000
Madagascar	Cyclone early warning system	2016	Cyclone	3 750 000
	Flood prevision and warning system	2017	Flood	1 021 000
	Early warning system tsunami and landslide	2014	Tsunami and landslide	National
	Locust outbreak Early Warning System	2016	Locust outbreak	National
	Food Security and Vulnerability Information System (SISAV)	2016	Food Security	Three regions of the South-East Madagascar i.e.Vatovavy, Fitovinany, Atsimo Atsinanana
	Monitoring Food and Nutrition Security - SAN	2021	Food Insecurity and Malnutrition	Three regions of Southern Madagascar (Androy, Anosy and Atsimo Andrefana)
Malawi	Health Surveillance	2016	Epidemic Disease / Public health emergency	Nationally
	Food and Nutrition Security Early Warning System	2016	Food Security	Nationally
	National Early Warning System (Hydro-Met & Geological EWS)	On-going	MHEWS (Floods, Drought, Dry spells, Fall Army Worms, etc)	Nationally
	Community Based Early Warning System	On-going	Floods & drought	Varies from one community to the other
Mozambique	Community sensors	Before 2016	Flood	68 000
Hydrometrical Scale Before 2016			Flood	32 000
	Datawinner	Before 2016	Multi hazard	3 101 227
	National Meteorological Seasonal Forecast	Before 2016	Multi-hazard covering hydro-met hazards	National
	Food and Nutrition Security Early Warning System	Before 2016	Food and Nutritional insecurity Famine	National
Namibia	Meteorological Services	Before 2016	Multi hazard	-Nationwide
	Hydrological Services	Before 2016	Multi hazard	-Nationwide
	Geological Services	Before 2016	Seismic	Nationwide
	Epidemiological Services	Before 2016	Epidemic	Nationwide
	National Remote Sensing Centre	Before 2016	Wildfires	Nationwide
	Vulnerability assessment and analysis	Before 2016	Multi hazard	Nationwide
	Food security reports	Before 2016	Multi hazard	Nationwide

Member State	Early warning systems in place	Existing (before 2016)	Focus	Number of people covered by multi-hazard EWS (G-3)
South Africa	Impact based EWS (SW Weather Service and NDMC)	Existing but improved on in the last 3 years	Single hazard Impact driven Indicate mitigation measures	Covers 9 provincial DM entities but limited to sectors within it.
	National communication television coverage during day by all national channels	Existing but improved on in the last 3 years	Single hazard Impact driven Indicate mitigation measures	Covers 9 provincial DM entities but limited to sectors within it.
	Local radio	Existing but improved on in the last 3 years	Single hazard Impact driven Indicate mitigation measures	Covers 9 provincial DM entities but limited to sectors within it.
	Ward level communication paths (councillors and traditional leaders)	Existing but improved on in the last 3 years	Single hazard Impact driven Indicate mitigation measures	Covers 9 provincial DM entities but limited to sectors within it.
Zambia	SMS Alert System sent through Mobile Service Providers	Before 2016	Multi-hazard covering floods, Fall Army Worms and Epidemics	National
	Flood Early warning System (EWS)	2018	Single hazard d - Floods	District
	Community Radio Stations	Before 2016	Multi-hazard	Targets specific communities
	Surveillance systems on epidemics	Before 2016	Single hazard based on the sector	National
	National Meteorological Seasonal Forecast	Before 2016	Multi-hazard covering hydro-met hazards	National
	Food and Nutrition Security Early Warning System	Before 2016	Food and Nutritional insecurity Famine	National
Zimbabwe	Civil Protection Organisation National Early Warning System	Yes	Multi-hazard (Cyclones, Floods, storms, Epidemic Diseases)	National (10 provinces and 72 districts)

There is progress on this Target over the periods in question, and most MS reported on existing EWS, which has been in place before 2015. The main challenge on this indicator is that, though various MS has incorporated multi-hazard systems to a degree, most MS have several ***single*** hazard focussed warning systems with very little integration. Poor coordination at the national and regional levels hinders effective MHEWS. The lack of meteorological data capture platforms or networks could also contribute to less effective EWS. Weather and climate forecasts in Africa are produced in a data-scarce environment, resulting in biased early warnings. RECs are recommended to play a much more leading role in promoting, assisting and enhancing regional MHEWS among MS, taking cognisance of the necessity of sovereign national warnings.

3.7.1 AFRICA MULTI-HAZARD EARLY WARNING AND EARLY ACTION SYSTEM (AMHEWAS)

The African Union (AU) will develop the Africa Multi-Hazard Early Warning and Early Action System (AMHEWAS) framework, to be established in 2021, to improve early warning systems and facilitate early action. The system will be developed with technical and financial support from international partners, including the United Nations Development Programme (UNDP), the World Meteorological Organization (WMO), and the African Development Bank (AfDB), as well as the UNDRRs support and contribution towards the general development, for instance staffing, technical support through TOTs and development of SOPs. The AMHEWAS framework, anchored on existing legislative and institutional structures, will aim to enhance coordination between sectoral warning systems, MS, and RECs. The establishment of effective early warning systems has been a goal of the African Union since 2015, when the target was established by the SFDRR to "substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessment to the people by 2030". These international guidelines were updated in 2017 by the International Network for Multi-Hazard Early Warning Systems to recognise the benefits of multi-hazard early warning systems, which consist of four essential components: hazard monitoring, data analysis, dissemination of warnings, and response capacity.

As part of the Programme, the AU Commission (AUC) will establish the AMHEWAS Continental Situation Room at the AU Headquarters in Addis Ababa and two other pilot situation rooms for Intergovernmental Authority on Development (IGAD) in Nairobi, Kenya, and a multi-hazard Climate Advisory Situation Room in Niamey, Nigeria, housed in the Africa Centre for Meteorological Application for Development (ACMAD). The three situation rooms will interoperate to produce continental early warning products. During phase II, the programme will be rolled out to other RECs (ECOWAS, ECCAS, SADC and UMA) and member states. The AMHEWAS programme will aim to substantially reduce continental disaster losses by 2030. To achieve this goal, the programme aims to deliver on the following four (4) key output areas, which are: enhanced multi-hazards risk knowledge; strengthened risk governance and coordination; strengthened anticipatory action and preparedness, and enhanced preparedness and response capabilities of the Africa Multi-hazard Early Warning and Early Action System Situation. These interventions will be implemented in the RECs and member states by establishing interoperable 24/7 situation rooms at RECs and member states level, development and establishment of impact- based early warning, capacity building of RECs and member states, secondment of staff to situation rooms and operationalisation of the Pan- African capacities for preparedness and response among others. The AMHEWAS system will be producing Continental Watch Bulletins for all 55 African Union Member States. The system endeavours to provide timely and accurate early warning information to communities and other stakeholders, enhancing disaster preparedness and response and reducing the impact of disasters on communities and the economy.

The development of the AMHEWAS framework includes a comprehensive assessment of existing early warning systems, stakeholder consultations, and validation processes. The seven-year, three-stage program includes 22 key activities focused on achieving five specific outputs: approval of the continental MHEWAS program, establishment of common protocols and platforms for data sharing, enhancement of 24/7 hazard monitoring and warning services, functional end-to-end warning dissemination and communication systems, and development of protocols and materials for preparedness. This initiative focuses on enhancing early warning systems for natural hazards, biological hazards, epidemics, pandemics, and conflicts, including floods, droughts, storms, and epidemics, to enable governments,

communities, and other stakeholders to take appropriate actions to mitigate the impacts of these disasters.

The AMHEWAS system will use advanced technologies, including remote sensing, satellite imagery, and weather forecasting models, to monitor and predict potential hazards and disasters. The system also incorporates traditional knowledge and local weather observations from communities to improve accuracy and enhance the understanding of hazards and their potential impacts. In addition to providing early warning information, the AMHEWAS system will promote the use of actionable information to support decision-making and enhance disaster preparedness and response.

The system will facilitate the dissemination of early warning information to key stakeholders through various channels, including mobile phone alerts, community radio, and other communication channels. The delivery of the MHEWAS Programme will be facilitated through the Early Warning Technical Working Groups (EW-TWGs) and MHEWAS coordinators at the continental, regional, and national levels, including meteorological and hydrological services, disaster management agencies, and other relevant stakeholders. The system aims to improve disaster risk reduction by enhancing coordination, promoting the use of innovative technologies, and strengthening the capacity of communities to respond to disasters. The successful implementation of the AMHEWAS framework relies on the collaboration and support of multiple partners and stakeholders at the MS, as well as the regional, and continental levels, to support the development of the continental system and actively participate in the seven-year development programme. The continuation of adoption of the framework by more MS could lead to significant improvements in early warning and early action, ultimately leading to a reduction in losses, both in terms of lives and livelihood, across the African continent.

04

CHAPTER 4:

PROGRESS ON POA TARGETS

INTRODUCTION

In addition to the seven SFDRR Targets the PoA calls for the measurement of an additional five targets unique to Africa. These Targets are measured according to the MRF and the sections that follows uses the variables to report on the progress made by Member States. The SFM regional module for Africa is an innovative tool designed to assist African Member States in their efforts towards DRR and resilience-building. Developed through a joint venture by the UNDRR and the AUC, this mechanism integrates the reporting of the Program of Action (PoA) into the SFM, facilitating comprehensive monitoring of DRR progress across the continent. By using this tool, MS can track and report their progress under the Sendai Framework's seven targets and PoA,, ensuring compliance, fostering transparency, and encouraging informed decision-making for risk reduction.

To ease in comparison and overall progress, an Africa PoA Dashboard was developed which uses an averaged combination of the Target scores to derive at a 2015-2016, 2017-2018 and 2019-2020 score. It should be noted, that due to the significant lack of data provided by the MS for the 2019-2020 period, it is deemed nearly impossible to effectively, and more importantly accurately, depict the true value for each MS and REC respectively. The analysis provided in chapter 4 was done through incorporating the data which was provided by MS for this period, along with the previous data (2017-2018) for those that did not provide data. Thus, the analysis is an inference of progress/ regression.

AFRICA POA DASHBOARD

The Africa PoA Dashboard represents the overall progress made by Member States against the PoA. The variables are linked to a 5-point Likert scale (1 meaning no to little progress, and 5 meaning comprehensive progress), as per the requirements of the MRF. These were in turn colour coded for easy and visual reference. These colours are used throughout this report (in tables and maps) to facilitate reference, understanding and comparison.

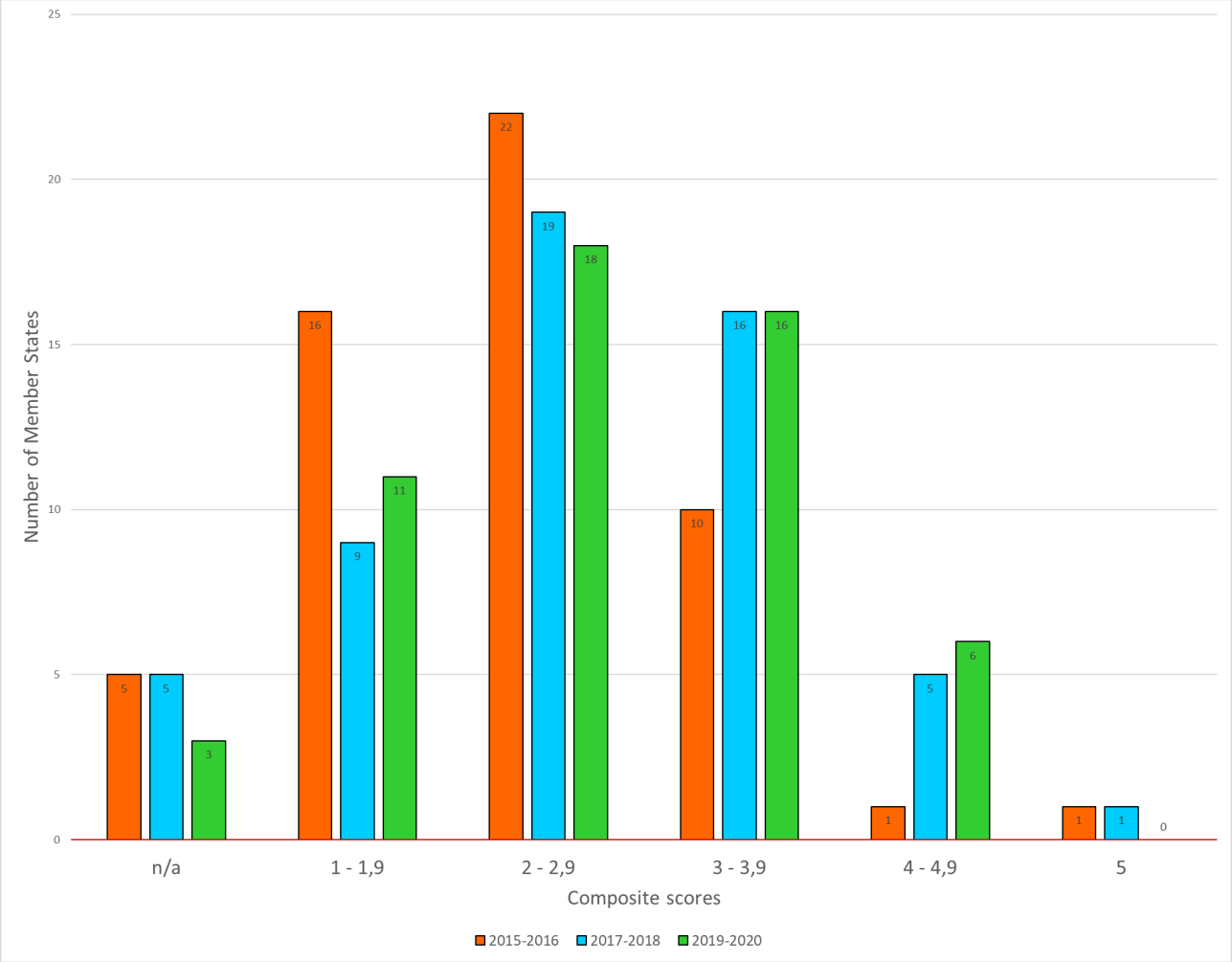


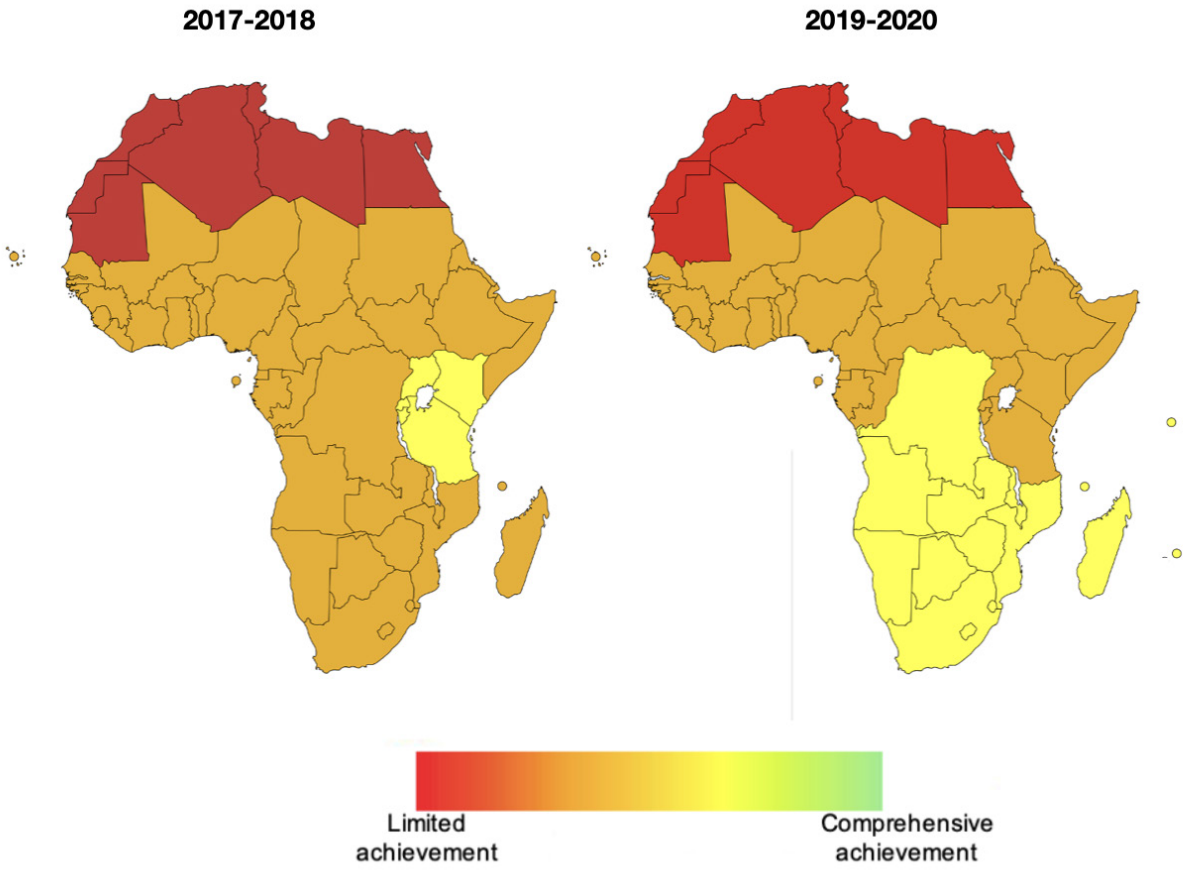
Figure 7: Member States' Composite PoA Dashboard Scores (2015-2020)
(Source: Member States' reporting on the SFDRR and PoA, reports submitted by MS to AUC)

Results on the PoA indicators are represented in Table 20 below is aligned with the requirements of the Monitoring and Reporting Framework. In most instances the reporting on an indicator consists of a number of variables which has been normalised according to the "Proposed Criteria for Assessing Indicators" in the MRF (see Annexure A).

The aggregated scores of the two periods forms the basis of comparison. Where no data were reported, a grey colour indicating "n/a" were used. A total of 13 variables linked to the PoA Targets were used. All of these indicators use the 5-point rating scale above and thus scores could be averaged across regions and the continent. As stated above, in the previous reporting timeframe, when no data was reported, a "n/a' was used, though for this report, due to the fact that so many MS did not provide any information, previous data was transferred, shown as as an asterisk "*" from the previous timeframe if there was no data reported in the reporting period. The rationale for this was so as to be able to do any measurable reporting on a continental scale, as a "n/a" on this scale would impede the ability to expand on this chapter.

Map 9 shows an overall comparison between the periods 2015-2016 and 2017-2018 linked to the various RECs (average scores of all MS per REC). All of the data reported on by the various MS were averaged and linked to their specific REC. Egypt and the Saharawi Republic were linked to the North Africa region for comparison purposes. Where MS are members of more than one REC, the scores were incorporated in both RECs. From the map it is evident that in general all of the RECs are making progress in achieving the PoA Targets.

Map 9: Comparative REC achievement of the PoA, 2017-2018 vs 2019-2020.



(Source: Member States' reporting on the SFDRR and PoA, reports submitted by MS to AUC)

Table 20 below provides a quick reference "dashboard" of each member state linked to the two reporting periods. MS with no data are indicated in grey. From the dashboard it is clear that the majority of all AU MS are making progress towards the implementation of the PoA targets. With the exception of very few. Congo, Guinea, Sao Tome and Principe and Zambia showed regression. Angola, Gabon, Ghana, Mali, Mauritania, Morocco, Namibia, and Somalia reported no further **overall** progress, however this does not mean no progress has been made on all indicators. Rwanda reported that they have comprehensively reached all of the PoA Target

Table 20: Member States' SFDRR and PoA Dashboard

Algeria		Angola		Benin		Botswana		Burkina Faso		Burundi		Cameroon	
3,4	2015	1,1	2015	2,7	2015	2,3	2015	2	2015	2,4	2015	2,9	2015
4,4	2018	1,1	2018	3,4	2018	2,7	2018	2,4	2018	3,1	2018	3,1	2018
4,2	2020	1,1*	2020	2,1	2020	2,7*	2020	2,4*	2020	3,5	2020	3,1*	2020
Cabo Verde		**CAR**		**Chad**		**Comoros**		**Congo**		**Cote d`Ivoire**		**Djibouti**	
n/a	2015	1,6	2015	1,3	2015	1,2	2015	2,1	2015	n/a	2015	1,6	2015
n/a	2018	2,9	2018	3,3	2018	1,6	2018	1,4	2018	n/a	2018	2,6	2018
n/a*	2020	2,9*	2020	3,1	2020	1,6*	2020	1,5	2020	3	2020	2,6*	2020
DRC		**Egypt**		**Equatorial Guinea**		**Eritrea**		**Eswatini**		**Ethiopia**		**Gabon**	
1,8	2015	1,9	2015	1	2015	n/a	2015	1,8	2015	2,4	2015	3	2015
2,2	2018	3,6	2018	1,1	2018	n/a	2018	2,2	2018	2,4	2018	3	2018
2,2*	2020	3,6*	2020	1,1*	2020	n/a*	2020	3,4	2020	2,4	2020	3,5	2020
Gambia		**Ghana**		**Guinea**		**Guinea Bissau**		**Kenya**		**Lesotho**		**Liberia**	
2,2	2015	4	2015	1,6	2015	2,5	2015	3,7	2015	2,4	2015	1,9	2015
2,6	2018	4	2018	1,5	2018	2,5	2018	4	2018	3,9	2018	2,9	2018
2,1	2020	4*	2020	1,5*	2020	2,1	2020	2,1	2020	3,9*	2020	3,2	2020
Libya		**Madagascar**		**Malawi**		**Mali**		**Mauritania**		**Mauritius**		**Morocco**	
n/a	2015	1,8	2015	3,8	2015	3	2015	1	2015	2	2015	1	2015
n/a	2018	2,7	2018	4,1	2018	3	2018	1	2018	3,4	2018	1	2018
n/a*	2020	2,7*	2020	4,1	2020	3*	2020	1*	2020	3,4*	2020	1*	2020
Mozambique		**Namibia**		**Niger**		**Nigeria**		**Rwanda**		**Sao Tome & Principe**		**Senegal**	
2,4	2015	2,7	2015	2,1	2015	2,1	2015	5	2015	2,3	2015	2	2015
3,4	2018	2,7	2018	2,2	2018	2,2	2018	5	2018	1,9	2018	2,4	2018
3,4*	2020	2,5	2020	2,2*	2020	4	2020	2,6	2020	1,9*	2020	2,3	2020
Seychelles		**Sahrawi Republic**		**Sierra Leone**		**Somalia**		**South Africa**		**South Sudan**		**Sudan**	
2	2015	N/A	2015	2,9	2015	1,2	2015	3,7		n/a	2015	3,2	2015
2,5	2018	N/A	2018	3,6	2018	1,2	2018	3,8		n/a	2018	4,1	2018
1,9	2020	N/A	2020	2,3	2020	1,6	2020	4		2,6	2020	4,1*	2020
Tanzania		**Togo**		**Tunisia**		**Uganda**		**Zambia**		**Zimbabwe**			
3,4	2015	2,2	2015	2,1	2015	2,1	2015	3,7	2015	3,2	2015		
3,8	2018	2,8	2018	2,8	2018	3,4	2018	3,8	2018	3,3	2018		
3,4	2020	3,7	2020	2,8*	2020	1,8	2020	3,8*	2020	3,5	2020		

[refers to MS not providing any information, thus the previous number was carried over]*

4.1 POA ADDITIONAL TARGET 1: Increase the number of countries with DRR in their educational systems at all levels

MS has only made minor progress in including DRR in Education Systems at all levels since reporting began in 2015-2016. Since reporting began, the continental average for increasing the number of countries with DRR in their educational systems at all levels has only increased by a score of 0.4. Even with the slight increase by the end of the 2019-2020 reporting cycle, the score achieved for this POA target can still only be classified as a **limited achievement**.

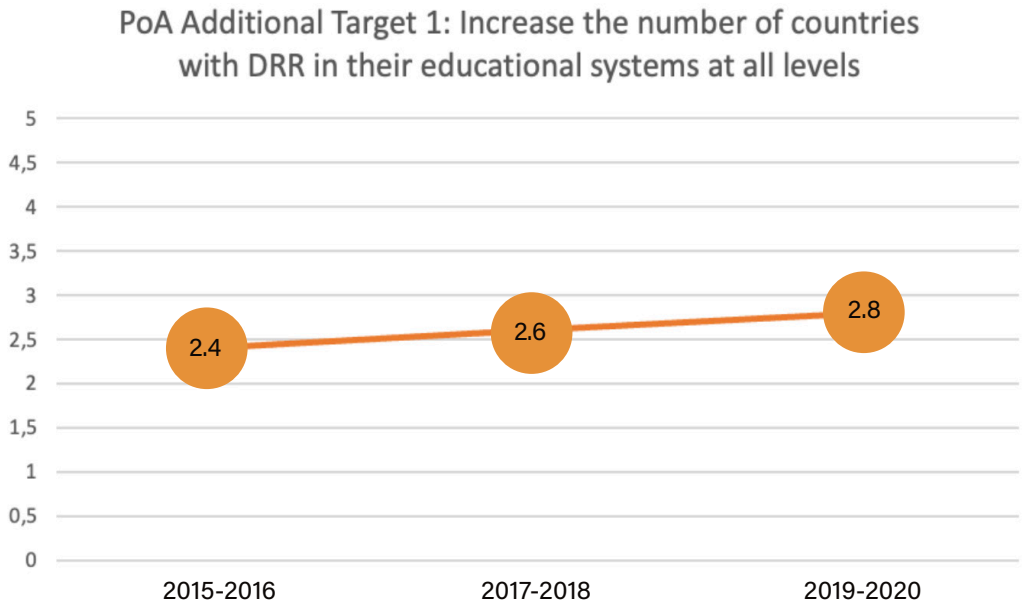


Figure 8: Progress in incorporating DRR in educational Systems at all levels between reporting periods.

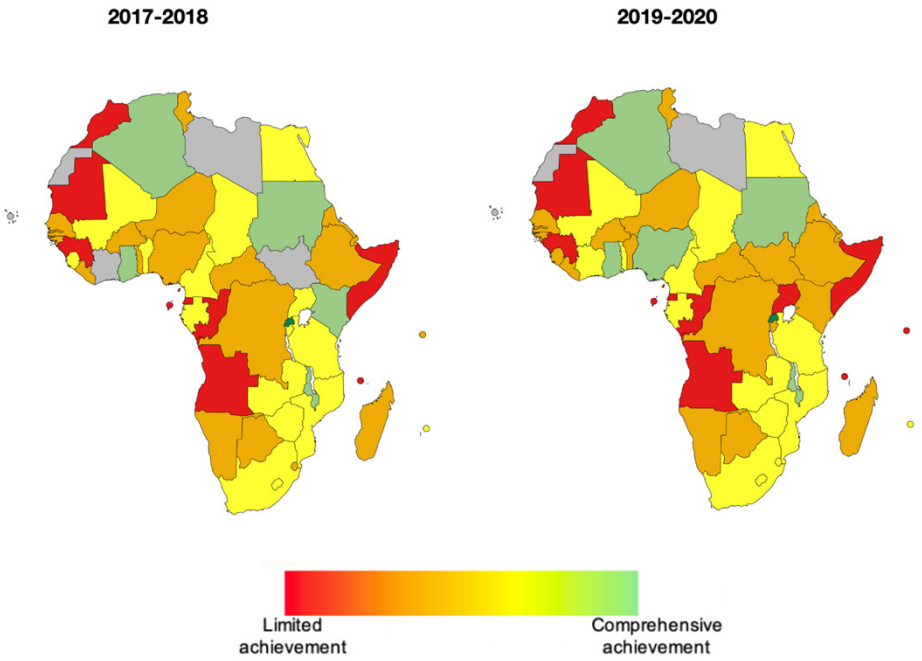
Upon deeper analysis, a significant area of concern is the lack of integration of DRR into both primary and secondary levels. On a continental level, the scores for both these targets have not progressed beyond limited achievement since reporting began. This picture changes only slightly when broken down by region. From 2015/2016 to 2019-2020, only ECCAS and SADC managed to move their integration of DRR into primary school curricula to a moderate level of achievement. All other regions only achieved limited achievement in integrating into primary school curricula during the 5-year period. In integrating DRR into secondary school curricula, only ECCAS, SADC, and North Africa indicated a moderate level of achievement. The main challenges in integrating DRR within the primary and secondary, as indicated by MS are a lack of knowledge by educators on DRR issues, an oversubscribed curriculum and the lesser priority given to DRR issues. There is a need for Member States and institutions to focus more on DRR education at the lower education levels, which can have a more significant impact on saving lives and livelihoods.

Table 21: DRR integrated in all curricula (2015-2020)

REC	DRR in primary education			DRR in secondary education			DRR in tertiary education			DRR in professional courses			COUNTRY INDEX		
	2015-2016	2017-2018	2019-2020	2015-2016	2017-2018	2019-2020	2015-2016	2017-2018	2019-2020	2015-2016	2017-2018	2019-2020	2015-2016	2017-2018	2019-2020
EAC	2.8	3.1	2.8	2.8	3.2	2.4	3.4	3.7	3.4	3.3	3.4	3.1	3.3	3.3	2.9
ECCAS	2.5	2.9	3.4	2.4	2.8	3.2	2.6	2.8	3.6	2.1	2.5	3,7	2.2	2.5	2.4
ECOWAS	2.8	2.9	2.0	2.4	2.0	2.3	2.1	3.3	3.2	2.3	3.1	3.0	1.8	2.0	2.6
IGAD	2.9	3.1	2.5	2.7	3	1.7	4.0	4.2	3.7	3.9	4.1	3	2.7	3	2.5
SADC	2.5	3.1	3.6	2.2	2.6	3.2	3.2	3.7	3.7	2.7	3.0	3.5	3.7	3.2	3.5
North Africa	1.0	2.0	2.2	1.0	1.6	3	1.4	2.4	3.6	1.0	2.5	3.5	1.1	2.1	3.0
Africa	**2.4**	**2.8**	**2.7**	**2.2**	**2.5**	**2.6**	**2.7**	**3.3**	**3.5**	**2.5**	**3.1**	**3.3**	**2.4**	**2.6**	**2.8**

(Source: Member States' reporting on the SFDRR and PoA, reports submitted by MS to AUC)

Most progress toward POA Target 1 has been made at the tertiary education level and DRR in professional courses. Most regions indicated that they have transitioned from no achievement and limited achievement of the target about integration into tertiary education and integration into professional courses in 2015-2016 to moderate achievement across the board by 2019/2020. If this upward trend continues, both the sub-indicators relating to integrating DRR into tertiary curricula and professional courses could reach substantial achievement during a future reporting cycle. The improvement in both these indicators is largely due to the market's current need and the nature of disaster risk studies. Several undergraduate courses are present on the continent.



Map 10: DRR integrated in all curriculum (2015-2018)

- *Grey areas signify no data provided by MS.* **(Source: Member States' reporting on the SFDRR and PoA, reports submitted by MS to AUC)**

Although this POA target has only achieved **limited achievement** on the continent, several MS are taking steps to increase the integration of DRR into education at all levels. Specifically, Egypt, Gabon, Kenya, Malawi, Mali, Nigeria, Rwanda, Sierra Leone, Zambia, Tanzania, and Uganda have included a specific focus in their national policy and/or legislation to improve the integration of DRR into education at all levels. These efforts have already started to bear fruit. They can serve as best practice examples for other continents' MS. Overall; a more concerted effort is needed in all regions to engage MS to include DRR, specifically in primary and secondary education. The current implementation model is piecemeal and haphazard, focusing too much on specific local-level gains. DRR integration at primary and secondary school levels can only be effective if a top-down approach drives it through the various Departments of Education in MS. It is recommended that international cooperating partners engage MS at national levels to facilitate integration across scales and ensure national roll-out for maximum gains.

4.2 POA ADDITIONAL TARGET 2: Increase integration of DRR in regional and national sustainable development, and climate change adaptation frameworks, mechanisms and processes

Regarding POA target 2, increase integration of DRR in regional and national sustainable development and climate change adaptation frameworks, mechanisms and processes, the continent has only made minor progress since reporting began in 2015/2016. From this time to the most recent reporting period, 2019/2020, the overall score for this target has only increased by 0.6 and remains within the range of **limited achievement.**

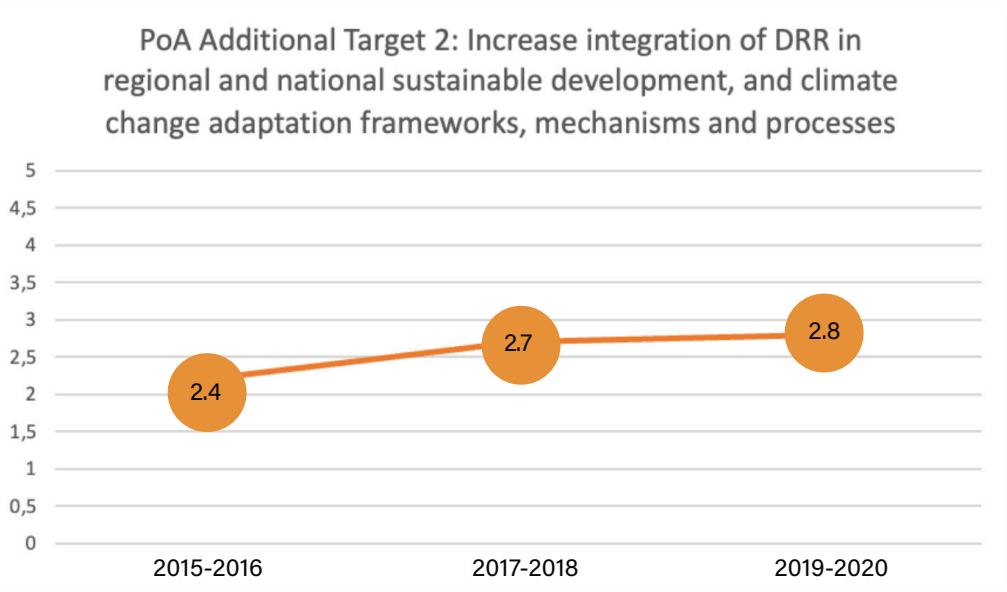


Figure 9: Increase integration of DRR in regional and national sustainable development and climate change adaptation frameworks, mechanisms and processes
(Source: Member States' reporting on the SFDRR and PoA, reports submitted by MS to AUC)

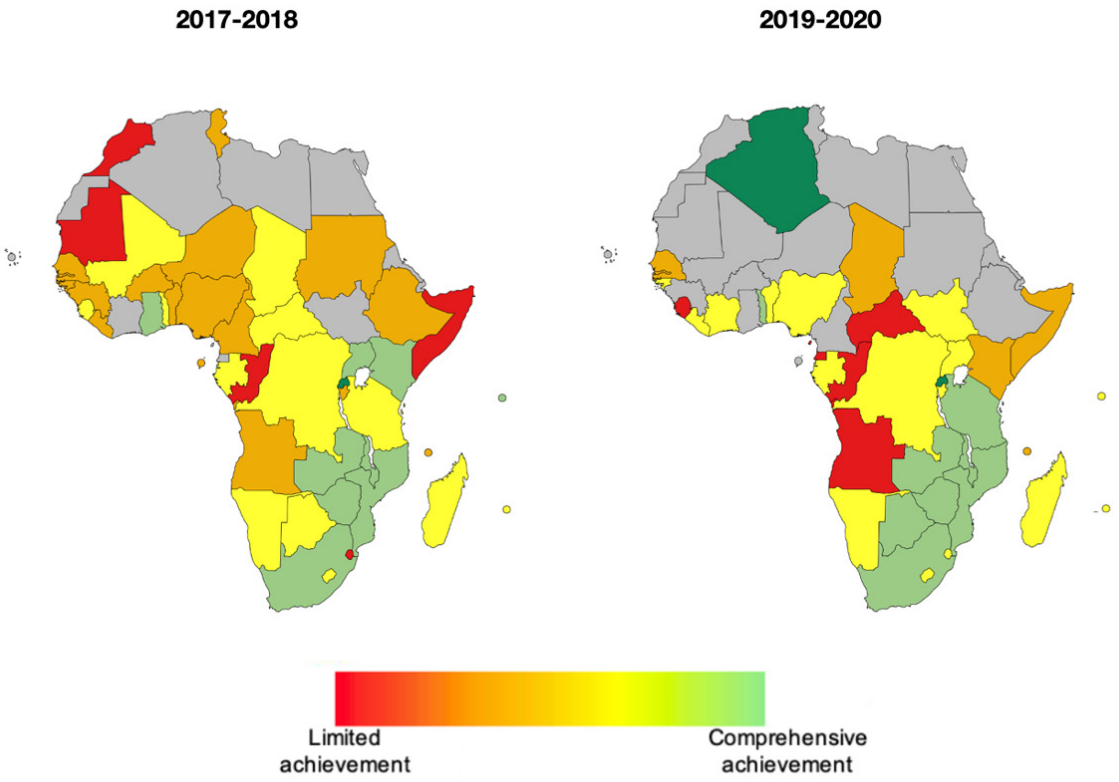
However, when one analysis the reporting from REC, more significant progress can be observed by most RECs between the two most recent reporting periods and since reporting began. For instance, between 2017/2018 and 2019/2020, ECCAS, ECOWAS, SADC and North Africa all reported improvement relating to this target. Significantly these improvements moved most of these regions from the limited achievement to the moderate achievement bracket for this indicator.

Table 22: DRR, sustainable development and climate change integration

DRR, SD, CC integration			
REC	**2015-2016**	**2017-2018**	**2019-2020**
EAC	2.8	3.3	2.5
ECCAS	2.2	2.2	3.6
ECOWAS	2.0	2.3	2.8
IGAD	2.1	2.4	1.2
SADC	2.5	3.5	3.6
North Africa	2.0	2.5	3.0
Africa	**2.2**	**2.7**	**2.8**

(Source: Member States' reporting on the SFDRR and PoA, reports submitted by MS to AUC)

Notable progress was reported by Ghana and Mali in integrating DRR in environmental policies and frameworks, including CCA. Additionally, Ghana, Guinea Bissau and Sierra Leone have excelled in integrating DRR into financial instruments in the ECOWAS region. In the UMA region, Tunisia has forward-looking legislation/policies that address the global and continental DRR target to integrate DRR in national sustainable development and climate change adaptation frameworks, mechanisms and processes. Furthermore, the National Strategy for Climate Change (2012), the National Strategy for Sustainable Development (2014) and specific regulatory texts integrate DRR in all these domains. For the past ten years, a fair amount of capacity development in this arena has also occurred in the SADC region. It is evident from the research that more of the SADC MS are ensuring the inclusion of DRR in environmental policies and vice versa.



Map 11: DRR in sustainable development and climate change strategies (2015-2018)

- **(Source: Member States' reporting on the SFDRR and PoA, reports submitted by MS to AUC)**

The longer-term trend for this target from the first reporting period to the current is also positive, with a clear upward trend in achieving the target. Since 2015-2016, ECCAS, SADC, and North Africa have progressed to the moderate achievement of the target, whilst ECOWAS is on the brink of joining this grouping. The only region that has shown a decline over time in achieving this indicator is IGAD. The IGAD region has moved from a score of 2.1 during the first reporting period to 1.2 during 2019-2020.

Considering the various temporal scales and scores achieved, the continents' achievement of the indicator can be described as a **limited achievement with a clear upward trend.** Many best practice examples from the various RECs support this upward trend. Although RECs and their MS have recorded progress in integrating climate change, sustainable development and disaster risk reduction, challenges persist. For instance, sometimes separate national governance structures and ministries exist for DRR and Climate, hindering optimal integration. Integration is mainly in policy and legislation, and little implementation has yet occurred. MS and RECs must aim towards finding better integration for application purposes. Additionally, the Insurance sector in many MS still needs to integrate DRR in more of their activities, as most MS indicate little or no progress.

4.3 POA ADDITIONAL TARGET 3: Expand the scope and increase the number of sources for domestic financing in DRR

MS have significantly underreported the number of sources for domestic financing in DRR. This is mainly because funding is spread across various sectors and spheres of government. MS indicated that this Target is not well defined, making obtaining data problematic. However, several MS reported on the number of such domestically funded DRR programs.

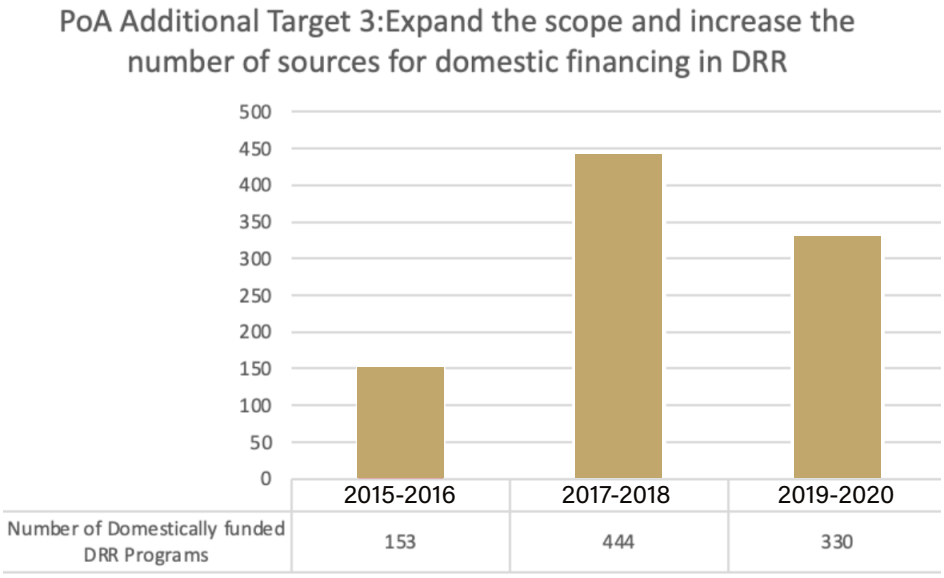


Figure 10: The number of domestically funded DRR program in Africa across reporting periods
(Source: Member States' reporting on the SFDRR and PoA, reports submitted by MS to AUC)

The number of domestically funded DRR programs has fluctuated dramatically since reporting started in 2015-2016. For instance, between 2015-2016 and 2017-2018, there was almost a three-fold increase in the number of domestically funded DRR programs on the continent. This dramatic increase could be due to the Sendai Framework for Action launch in 2016, to which all MS committed. This could have brought about a temporary increase in political commitment and investment in DRR programs on the continent. The surge in DRR domestically funded DRR programs did, however, not carry over to the 2019-2020 reporting cycle with a sharp decline in projects funded. During 2019-2020 only 330 DRR projects were domestically funded. This decline in domestically funded DRR programs

could be associated with the emergence of COVID-19 and the subsequent redistribution of government funds to assist in combating the spread of the virus.

Thus, the continent is showing **moderate progress** in achieving POA Target 3. There has been an increase in investment by national governments in DRR programs since reporting started. However, some challenges persist and need to be addressed. For instance, the percentage of allocation and disbursement of funds for DRR is generally very complex to obtain from government departments because projects or activities are managed at various levels in MS but not detailed to DRR. Additionally, data concerning DRR programmes are not generally recorded separately but integrated into the cost of the overall projects. It is recommended that MS establish mechanisms for tracking domestically funded DRR projects. Much better local-national reporting is thus needed.

4.4 POA ADDITIONAL TARGET 4: Increase the number of countries with, and periodically testing, risk-informed preparedness plans, and, response, and post-disaster recovery and reconstruction mechanisms

POA target 4 is traditionally one of the stronger performing targets on the continent, as the target transitioned from limited achievement in the first reporting cycle (2015-2016) to moderate achievement in the following two reporting cycles, including 2019-2020. Most MS have a strong tradition of developing, testing and implementing risk-informed preparedness response, post-disaster recovery and reconstruction plans and mechanisms.

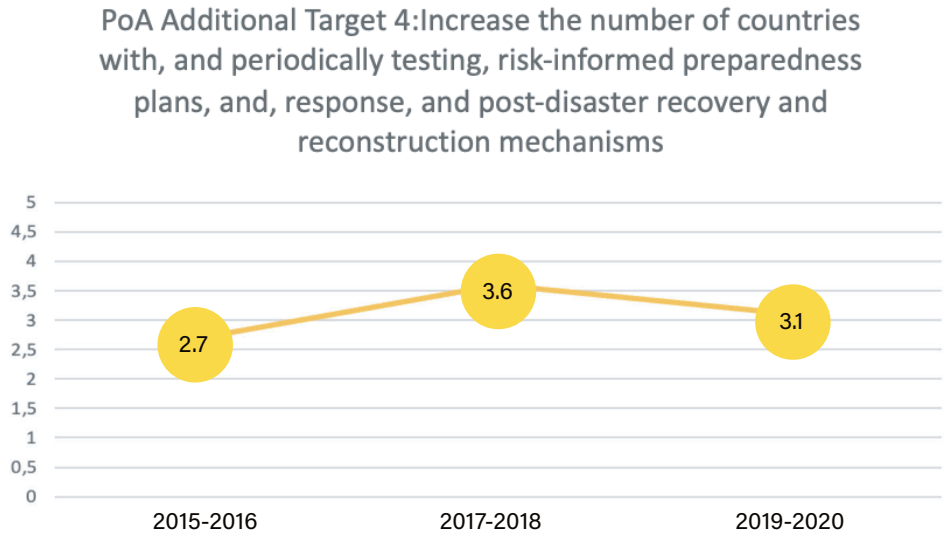


Figure 11: Overall score for countries periodically testing, risk-informed preparedness plans, and, response, and post-disaster recovery and reconstruction mechanisms between reporting periods.
(Source: Member States' reporting on the SFDRR and PoA, reports submitted by MS to AUC)

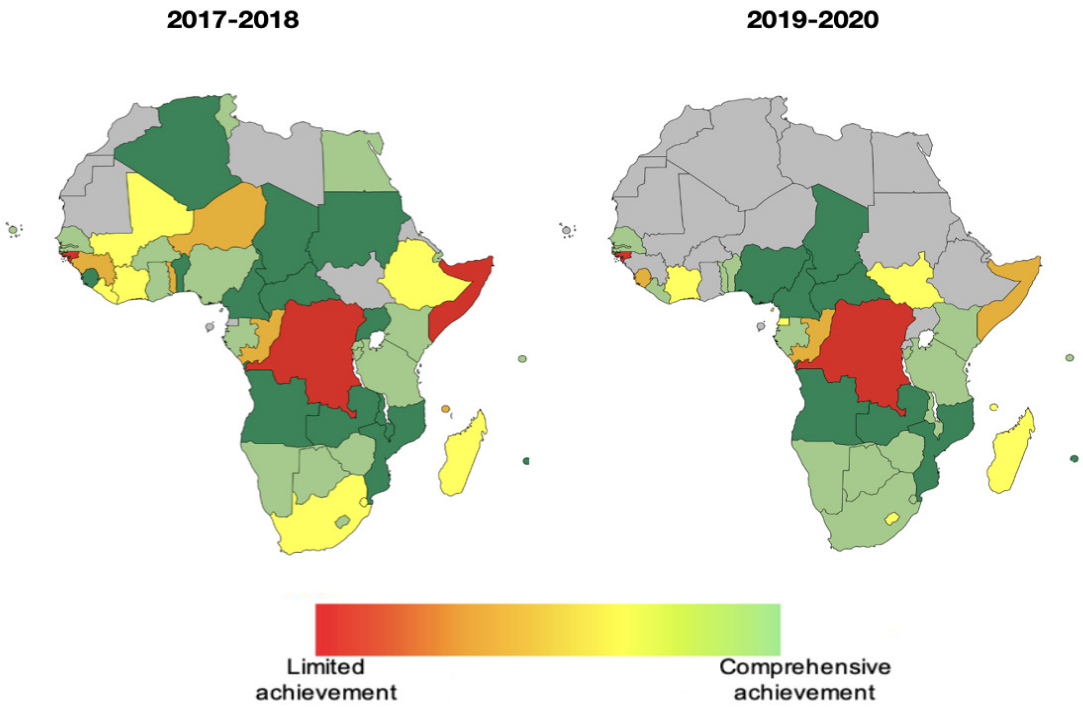
Although the progress in achieving this target has generally trended upward over time, severe downward trends have also occurred during the 2019-2020 reporting cycle. Both EAC and IGAD have reported significant decreases in their scoring, moving from moderate achievement of the target during the previous cycle to no achievement during 2019-2020. This decrease could be ascribed to a decline in the technical abilities and skills of personnel and volunteers in the preparedness system. Both regions also indicated that there had been a lack of independent assessments of preparedness capacities during 2019-2020. There is also a general lack of cooperation on national levels between response agencies which leads to misunderstanding of the currently available resources to support preparedness and contingency planning being done. Even with the setback experienced by EAC and IGAD during 2019-2020, it can be said that the continents achievement is at a level of **moderate achievement trending upwards**.

North Africa indicated the best performance in this target since reporting started in 2015-2016 and has reached the level of substantial achievement. In the case of Algeria, Egypt, Morocco and Tunisia this progress has been ascribed to a well-established disaster preparedness and contingency planning regiment that is in place at all administrative levels. These plans are actualised through and regular training exercises and rehearsals to test the accuracy of the plans. Historically, the SADC region has also taken a leading role in achieving progress in risk-informed preparedness planning. This trend has continued with Comoros, Eswatini, and South Africa making significant strides in improving their preparedness planning capacity during 2019-2020. Members state ascribed some improvement to increased disaster risk assessment and planning activities in at-risk communities. The ECCAS has showed major progress for this indicator during the 2019-2020 reporting period. Here, Burundi, Chad, Gabon and Republic of Congo made good progress in implementing risk-sensitive disaster preparedness and response plans, as well as mechanisms in post-disaster recovery and reconstruction during the 2019-2020.

Table 23: Regional progress for POA target 4 between reporting periods

RECs	2015-2016	2017-2018	2019-2020
EAC	2.4	3.1	1.8
ECCAS	2.0	3.0	3.7
ECOWAS	2.9	3.3	3.4
IGAD	3.0	3.7	1.3
SADC	3.0	3.8	3.7
North Africa	3.2	4.6	4.7
AFRICA	2.7	3.6	3.1

(Source: Member States' reporting on the SFDRR and PoA, reports submitted by MS to AUC)



Map 12: Risk-informed preparedness plans and response mechanisms (2015-2018)

- *Grey areas signify no data provided by MS.* **(Source: Member States' reporting on the SFDRR and PoA, reports submitted by MS to AUC**

4.5 POA ADDITIONAL TARGET 5: Increase the number of regional networks and partnerships for knowledge management and capacity development

SADC Member States did not report many new networks being established during the 2019-2020 reporting cycle. However, there are increasing cooperation networks between state entities and Universities. For instance, Botswana Eswatini and Zambia indicated that academics serve on their national DRR coordination mechanisms (such as Disaster Management Forums) while also providing research on crucial disaster risk management-related issues. The SADC-Rec has also established a crucial regional network in the shape of the Humanitarian and Emergency Centre (SHOC) in Nacala, Mozambique. SHOC aims to bolster the region's humanitarian, DRR and emergency response capacity. In **North Africa,** networks for DRR exist, but unfortunately, no new networks were reported by the Member States for 2019-2020. The PeriPeri U network is cited as a network that has been active in the region for several years.

ECCAS-REC reported partnerships with the European Union on environmental policy, WWF/CIFOR/forest definition, UN-Habitat/land policy, FAO/AU-IBAR/ agricultural policy, ICAT/regional centre project on climate transparency and the African Union/ClimSA/ Implementation of the Global Framework for Climate Services in Central Africa. **IGAD** has initiated networks with media and journalists to support more informed reporting by the media on risk prevention, preparedness and response. The current regional DRM strategy also seeks to develop a regional centre of excellence in DRM and a network with higher learning institutions for knowledge management. **ECOWAS** has been seeking to deepen their networks with scientific and academic institutions relevant to advance DRR in the region. This includes networking closely with regional centres such as ACMAD and AGRHYMET to sustainably support, provide relevant training, and forecast extreme hydro-meteorological events. Other key actors targeted are universities and higher institutions of learning and research centres. **EAC** reported no networks or partnerships for knowledge management and capacity development that could assist in addressing the region's disaster risk. Although the region is actively involved with Africa Risk Capacity.

Considering that most regions bar one, have some networks in place, the continent has scored a **moderate level achievement** for target 5. To improve, more networks should be created to manage cross-boundary risks.

CHALLENGES

The report identified several challenges relating to the reporting on the SFDRR by Member States. Most significantly, Member States find it challenging to generate and report disaster losses and other data. Such losses are recorded across sectors with very little coordination. Although Member States are committed to DRR funding, the multi-sectoral nature makes reporting very problematic (money in sectors). There is still inadequate technical expertise (in DRR) and institutional weaknesses in data management, especially within national DRR structures. There is severely limited and weak reporting on the Sendai Framework Monitor, and the use of DesInventar as a very useful tool is lacking.

Moreover, engagement in the context of the biennial report has experienced a significant decline compared to the prior reporting period, with participation rates decreasing from 91% to 57%. Although numerous in-person interactions and a continuous online platform were made available for Member States to address any challenges in data submission, participation has regrettably diminished. Of the 55 countries, only 31 provided any information. An additional ten countries initiated the submission process but ultimately failed to contribute any data, while 14 countries refrained from embarking on the submission process altogether.

RECOMMENDATIONS

Based on the data collected and trends emerging from the analysis of the SFDRR and POA targets for 2019-2020 the following recommendations can be made and should be addressed by REC and MS.

Recommendations emerging from the 2019-2020 reporting cycle

- The AUC, RECs and MS should develop an agreed-upon methodology to assess the direct economic losses inflicted by disasters.
- MS and RECs poorly record direct disaster losses. Better coordinating mechanisms must be put in place, and it is suggested that MS and RECs make concerted efforts to establish linkages with their national research institutions and universities which can play a valuable role in gathering and managing such data on an ongoing basis.
- The AUC, RECs and MS should develop an agreed-upon methodology to assess the nature and extent of monetary losses inflicted by disasters on critical infrastructure and disruption of critical service delivery.
- MS should invest more financial resources in developing data collection technology and skills at all levels of government, especially the local level, to improve data collection relating to SFDRR targets A, B, C and D.
- The AUC and appropriate RECs should make concerted efforts to support the MS who do not have national policies, laws and strategies for DRR in place yet.
- Funding tracking streams should be created to track the funds allocated to DRR policy and strategy implementation at all spheres of government, and these should be reported annually to the REC.
- Although bi- and multi-lateral cooperation for DRR on the continent is extensive, MS should advocate more strongly for technical and monetary assistance that suits their risk profiles and DRR needs.
- MS and RECs should continue collaborating with multiple donors and academic and community partners to develop or improve early warning systems to facilitate early action and reduce losses across the African continent regarding lives and livelihood.
- RECs should prioritise the development of cross-border multi-hazard early warning systems that support national early warning systems.
- A more concerted effort is needed in all regions to engage MS to include DRR, specifically in primary and secondary education. The various departments of education should drive integration efforts in MS in cooperation with international cooperating partners and institutions of higher learning.
- MS should establish institutional and technical mechanisms to improve intergovernmental data sharing relating to economic infrastructure and service delivery losses due to disasters.
- MS should improve cooperation between governmental departments responsible for climate change adaptation and disaster risk reduction at policy, legislative and project implementation levels.
- Encourage efforts by the insurance sector in MS to integrate DRR into more of their activities and insurance products.
- MS and RECs should establish mechanisms for tracking domestically funded DRR projects to improve reporting on PoA Target 3.
- Continuously develop technical abilities and skills of disaster risk management personnel and community volunteers to improve preparedness planning within MS.
- MS and RECs should develop more partnership networks to manage cross-boundary risks.
- Annual national-level reporting on the SFDRR and PoA must be enforced and upscaled to the REC level.
- Specific emphasis must be placed on ensuring disaggregated (gender, age, abilities etc) and metadata.
- National disaster risk reduction structures and the RECs' DRR Units must be strengthened

CONCLUSION

The data collected for the Biannual Report reveals that during the 2019-2020 reporting cycle, the continent only made limited progress towards the SFDRR Targets, with only

2 out 7 SFDRR targets achieved

The achievement of the POA target during the reporting period was slightly better, with

moderate scores achieved for 3 out of 5 POA targets

Consequently, there is still room for significant improvement by the AUC, RECs and MS in subsequent reporting cycles to achieve SFDRR and POA targets. However, particular challenges must be addressed for this to be realised.

The Biennial Report identified several challenges relating to the reporting on the SFDRR by MS. Most significantly, MS struggle to generate and report disaster losses and other data. Such losses are recorded across sectors with very little coordination. Although MS is committed to DRR funding, the multi-sectoral nature makes reporting problematic. There is still inadequate technical expertise and institutional weaknesses in data management, especially within national DRR structures. Reliance on a central statistical agency/organisation to record and report on disasters and losses has shown not to be effective, and national DRR units/offices/centres/ agencies must take responsibility for such data management. The research also revealed that some MS report disaster-related statistics using the Sendai Framework Monitor, while others use DesInventar, EM-DAT or their own reporting methods. This creates a fractious approach to reporting disaster-related data on the continent and contributes to some targets and indicators being severely underreported. The AUC and RECs should lead efforts in creating uniform methodologies and systems for disaster data reporting to enable a clearer picture of the continent's progress in achieving the SFDRR and POA targets. Furthermore, the UNDRR should work more closely with AUC to coordinate data collection and sharing.

ANNEX: INDICATOR ASSESSMENT CRITERIA AS PER THE MRF

(APPENDIX 2: ASSESSMENT CRITERIA FOR EACH OF THE INDICATORS IN THE MATRIX)

PoA Additional Target 1: Substantially increase the number of countries with DRR in their educational systems at all levels, as both stand-alone curriculum and integrated into different curricula

Indicator	Indicator Key Elements	Key Question(s)	Means of verification
1. Percentage of countries with DRR curricula in their educational systems at all levels	• Disaster risk reduction elements included in primary education curricula • Disaster risk reduction elements included in secondary education curricula • Higher education training on disaster risk reduction (Disaster risk reduction incorporated into curricula - architects, planners, MDs, agriculture experts, engineers, environment and infrastructure, social workers, health workers, etc.) • Broader disaster risk reduction training programmes for institutional staff of country institutions conducted	▪ Is DRR included in the national educational curriculum? ▪ Is DRR included in primary level educational curriculum? ▪ Is DRR included in secondary level educational curriculum? ▪ Is DRR included in higher/tertiary level educational curriculum? ▪ Is DRR included in professional level educational curriculum? ▪ Does school curricula, education material and relevant trainings include risk reduction and recovery concepts and practices?	- Primary school curriculum - Secondary school curriculum - Higher/tertiary curriculum - Professional DRR education programmes

PoA Additional Target 1: Substantially increase the number of countries with DRR in their educational systems at all levels, as both stand-alone curriculum and integrated into different curricula

Sub Indicator	Level 1 No progress has been made and/ or progress has stopped or moved backwards	Level 2 Minor progress achieved in disaster risk reduction actions, with no systematic commitment	Level 3 Institutional commitment to reduction disaster risk, but no substantial progress	Level 4 Systematic commitment at policy level, but insufficient resource allocation	Level 5 Full achievement with sustained commitment
1.1 Disaster risk reduction elements included in primary education curricula	No progress in incorporating disaster risk reduction elements in primary education curricula and school-wide activities at primary level	Awareness of the need to incorporate disaster risk into primary level education curricula, but efforts not yet borne fruit. Other improvised and ad hoc efforts carried out	Incorporation of disaster risk into primary level education curricula in progress, but at a very early stage	Incorporation of disaster risk into primary level education curricula significantly advanced	Disaster risk fully incorporated, in cross-cutting fashion, throughout primary secondary education.
1.2 Disaster risk reduction elements included in secondary education curricula	No progress in incorporating disaster risk reduction elements in secondary education curricula and school-wide activities at secondary level	Awareness of the need to incorporate disaster risk into secondary level education curricula, but efforts not yet borne fruit. Other improvised and ad hoc efforts carried out	Incorporation of disaster risk into secondary level education curricula in progress, but at a very early stage	Incorporation of disaster risk into secondary education level curricula significantly advanced	Disaster risk fully incorporated, in cross-cutting fashion, throughout secondary education.
1.3. Higher/tertiary education training on disaster risk reduction (Disaster risk reduction incorporated into curricula - architects, planners, MDs, agriculture experts, engineers, environment and infrastructure, social workers, health workers, etc.)	No progress in incorporating disaster risk reduction in higher/tertiary education curricula and training	Awareness of the need to incorporate prevention and disaster risk in tertiary education curricula, but no result yet	Incorporation of DRR in higher/ tertiary education institutions curricula in progress	Significant advances have taken place in the incorporation of DRR in higher/ tertiary education curricula	Higher/tertiary education fully supports professionalization of and research in DRR
1.4 Broader disaster risk reduction training programmes for institutional staff of country Institutions conducted	No training programmes for building capacity in DRR for institutional stakeholders	Some staff training initiatives in DRR launched, but basically in disaster response alone	Limited processes underway to hire staff with experience in DRR issues, and some support available for training to strengthen institutional capacity	Advanced processes underway to hire staff with experience in DRR issues, and support available for training to strengthen institutional capacity	Training programmes on DRR for professionals and technicians promoted and conducted

PoA Additional Target 2: Increase integration of DRR in regional and national sustainable development, and climate change adaptation frameworks, mechanisms and processes

Indicator	Indicator Key Elements	Key Question(s)	Means of verification
2. Percentage of RECs with DRR integrated in regional sustainable development frameworks, mechanisms and processes 3. Percentage of countries with DRR integrated in national sustainable development frameworks, mechanisms and processes 4. Percentage of RECs with DRR integrated in climate change adaptation frameworks, mechanisms and processes 5. Percentage of countries with DRR integrated in climate change adaptation frameworks, mechanisms and processes	• Disaster risk reduction is an integral objective of sustainable development related regional and national policies and plans, including for land use, natural resource management, environmental management. • Regional and national climate change adaptation frameworks, mechanisms and processes include elements which address disaster risk reduction. • The insurance sector is actively participating in disaster risk reduction • Financial institutions have included DRR criteria for approval of project financing	▪ Is DRR included in regional and national sustainable development plans? ▪ Is DRR included in regional and national climate change adaptation frameworks, mechanisms and processes? ▪ Are the impacts of disaster risk that are created by major development projects assessed? ▪ Are cost/benefits of disaster risk taken into account in the design and operation of major development projects?	• Climate change adaptation projects and programmes, plans and implementation progress reports • Programme development plans and implementation progress reports - Environment Impact Assessment (EIA) reports • Project financing agreements

Sub Indicator	Level 1 No progress has been made and/ or progress has stopped or moved backwards	Level 2 Minor progress achieved in disaster risk reduction actions, with no systematic commitment	Level 3 Institutional commitment to reduction disaster risk, but no substantial progress	Level 4 Systematic commitment at policy level, but insufficient resource allocation	Level 5 Full achievement with sustained commitment
2.1 Disaster risk reduction is an integral objective of sustainable development related regional policies and plans, including for land use, natural resource management, environmental management	No progress in including disaster risk reduction elements in sustainable development-related regional policies and plans, including for land use, natural resource management, environmental management	Some progress in considering disaster risk reduction in sustainable development related regional policies and plans, including for land use, natural resource management, environmental management	Strong awareness on the relation between disaster risk reduction and sustainable development related regional policies and plans, including for land use, natural resource management, environmental management Limited attempts to relate DRR issues in sustainable development-related regional and national policies and plans, including for land use, natural resource management, environmental management	sustainable development related regional policies and plans, including for land use, natural resource management, environmental management include disaster risk reduction issues, but a broader consideration as a cross cutting theme needs to be implemented	DRR fully integrated in sustainable development related regional policies and plans, including for land use, natural resource management, environmental management as a cross cutting theme
2.2 The insurance sector is actively participating in disaster risk reduction	No system in the region or country for insurance against the risk of disasters, or not applied	Insurance policies incorporate some conditions of prevention related to certain assets or persons, but in a limited manner and without technical assessment of risk situations	Awareness for the establishment of such mechanisms by the inhabitants of areas at risk. Participation by the private sector in providing disaster related insurance is limited	Establishment of disaster risk insurance based on greater technical knowledge of the risks. Little knowledge or awareness on the part of some potential beneficiaries	Strong participation by insurance agencies in risk assessment, with systems developed for different geographical areas and economic sectors
2.3 Financial institutions have included DRR criteria for approval of project financing	Disaster prevention not among the criteria for approval of projects in geographical areas and economic sectors at risk	There is awareness among financial institutions of the need to incorporate risk assessment among their criteria for approval; however, there has been little concrete progress	Some financial firms incorporate elements of risk assessment in their criteria for approval, but not in an organized fashion. Instead, they may be acting out of environmental considerations that have been previously established	Disaster risk management is a requirement for financing development projects located in areas at risk. However, problems of implementation remain	Many financial institutions in the country have developed disaster risk assessment methodologies and regularly apply obligatory risk assessment criteria before approving the funding of projects

Indicator 3 Assessment Criteria

Indicator	Level 1 No progress has been made and/ or progress has stopped or moved backwards	Level 2 Minor progress achieved in disaster risk reduction actions, with no systematic commitment	Level 3 Institutional commitment to reduction disaster risk, but no substantial progress	Level 4 Systematic commitment at policy level, but insufficient resource allocation	Level 5 Full achievement with sustained commitment
4.1 Regional climate change adaptation frameworks, mechanisms and processes include elements which address disaster risk reduction.	DRR not incorporated in regional climate change adaptation frameworks, mechanisms and processes	Limited attempts made to incorporate DRR in regional climate change adaptation frameworks, mechanisms and processes. Incorporating DRR in climate change adaptation frameworks, mechanisms and processes is still not legally compulsory	Strong attempts to incorporate DRR issues to regional climate change adaptation frameworks, mechanisms and processes. However, control mechanisms to ensure compliance still weak or lacking.	Regional climate change adaptation frameworks, mechanisms and processes include disaster risk reduction issues, but a broader consideration as a cross cutting theme needs to be implemented. Control mechanisms to ensure compliance in place and being strengthened.	DRR fully incorporated in regional climate change adaptation frameworks, mechanisms and processes. Control mechanisms to ensure compliance in place and functional.
4.2 The insurance sector is actively participating in disaster risk reduction	No system in the region or country for insurance against the risk of disasters, or not applied	Insurance policies incorporate some conditions of prevention related to certain assets or persons, but in a limited manner and without technical assessment of risk situations	Awareness for the establishment of such mechanisms by the inhabitants of areas at risk. Participation by the private sector in providing disaster related insurance is limited	Establishment of disaster risk insurance based on greater technical knowledge of the risks. Little knowledge or awareness on the part of some potential beneficiaries	Strong participation by insurance agencies in risk assessment, with systems developed for different geographical areas and economic sectors

4.3 Financial institutions have included DRR criteria for approval of project financing	Disaster prevention not among the criteria for approval of projects in geographical areas and economic sectors at risk	There is awareness among financial institutions of the need to incorporate risk assessment among their criteria for approval; however, there has been little concrete progress	Some financial firms incorporate elements of risk assessment in their criteria for approval, but not in an organized fashion. Instead, they may be acting out of environmental considerations that have been previously established	Disaster risk management is a requirement for financing development projects located in areas at risk. However, problems of implementation remain	Many financial institutions in the country have developed disaster risk assessment methodologies and regularly apply obligatory risk assessment criteria before approving the funding of projects

Indicator 5 Assessment Criteria

Indicator	**Level 1** **No progress has been made and/ or progress has stopped or moved backwards**	**Level 2** **Minor progress achieved in disaster risk reduction actions, with no systematic commitment**	**Level 3** **Institutional commitment to reduction disaster risk, but no substantial progress**	**Level 4** **Systematic commitment at policy level, but insufficient resource allocation**	**Level 5** **Full achievement with sustained commitment**
5.1 National climate change adaptation frameworks, mechanisms and processes include elements which address disaster risk reduction.	DRR not incorporated in national climate change adaptation frameworks, mechanisms and processes	Limited attempts made to incorporate DRR in national climate change adaptation frameworks, mechanisms and processes. Incorporating DRR in climate change adaptation frameworks, mechanisms and processes is still not legally compulsory	Strong attempts to incorporate DRR issues to national climate change adaptation frameworks, mechanisms and processes. However, Control mechanisms to ensure compliance still weak or lacking.	National climate change adaptation frameworks, mechanisms and processes include disaster risk reduction issues, but a broader consideration as a cross cutting theme needs to be implemented. Control mechanisms to ensure compliance in place and being strengthened.	DRR fully incorporated in national climate change adaptation frameworks, mechanisms and processes. Control mechanisms to ensure compliance in place and functional.

5.2 The insurance sector is actively participating in disaster risk reduction	No system in the region or country for insurance against the risk of disasters, or not applied	Insurance policies incorporate some conditions of prevention related to certain assets or persons, but in a limited manner and without technical assessment of risk situations	Awareness for the establishment of such mechanisms by the inhabitants of areas at risk. Participation by the private sector in providing disaster related insurance is limited	Establishment of disaster risk insurance based on greater technical knowledge of the risks. Little knowledge or awareness on the part of some potential beneficiaries	Strong participation by insurance agencies in risk assessment, with systems developed for different geographical areas and economic sectors
5.3 Financial institutions have included DRR criteria for approval of project financing	Disaster prevention not among the criteria for approval of projects in geographical areas and economic sectors at risk	There is awareness among financial institutions of the need to incorporate risk assessment among their criteria for approval; however, there has been little concrete progress	Some financial firms incorporate elements of risk assessment in their criteria for approval, but not in an organized fashion. Instead, they may be acting out of environmental considerations that have been previously established	Disaster risk management is a requirement for financing development projects located in areas at risk. However, problems of implementation remain	Many financial institutions in the country have developed disaster risk assessment methodologies and regularly apply obligatory risk assessment criteria before approving the funding of projects

PoA Additional Target 3:
Substantially expand the scope and increase the number of sources for domestic financing in DRR

Indicator	Indicator Key Elements	Key Question(s)	Means of verification
6. Total number of DRR programmes and activities domestically funded disaggregated by source – measuring increase in domestic sources for DRR financing		▪ Is disaster risk taken into account in public and private investment and planning decisions? ▪ What is the ratio of the budget allocation to risk reduction versus disaster relief and reconstruction? ▪ Are financial arrangements in place to deal with major disaster?	• National DRR budget • Decentralised or sub-national DRR budget • National contingency and calamity funds • Insurance and reinsurance facilities • Catastrophe bonds and other capital market mechanisms
7. Total cost of DRR programmes and activities domestically funded disaggregated by type of intervention funded – measuring scope of domestic DRR financing			
8. Percentage country level allocation and disbursement of funds for DRR programmes and activities			
9. Percentage of total cost of DRR programmes and activities domestically funded			

PoA Additional Target 4: Increase the number of countries with, and periodically testing, risk-informed preparedness plans, and, response, and post-disaster recovery and reconstruction mechanisms

Indicator	Indicator Key Elements	Key Question(s)	Means of verification
10. Percentage of countries with risk informed preparedness plans, response, and postdisaster recovery and construction mechanisms 11. Percentage of countries periodically testing their preparedness plans, response and postdisaster recovery and re construction mechanisms	▪ All organizations, personnel and volunteers in the preparedness system possess the required technical capacity to carry out essential elements and tasks for effective disaster response ▪ Independent assessment of disaster preparedness capacities and mechanisms have been undertaken and responsibility for implementation of recommendations assigned and resourced ▪ Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programmes	▪ Are there national programmes or policies for disaster preparedness, contingency planning and response? ▪ Are future disaster risks anticipated through scenario development and aligned preparedness planning? ▪ Did you undertake simulation exercises to the Contingency Plan with relevant Partners? ▪ Are recovery plans in place?	- DRR incorporated in these programmes and policies - The institutional mechanisms exist for the rapid mobilisation of resources in a disaster, utilising civil society and the private sector; in addition to public sector support. - Training and mock drills for emergency preparedness - Potential risk scenarios are developed taking into account climate change projections - Preparedness plans are regularly updated based on future risk scenarios - - simulation exercises are undertaken regularly

Indicator 10 Assessment Criteria

Indicator	Level 1 No progress has been made and/ or progress has stopped or moved backwards	Level 2 Minor progress achieved in disaster risk reduction actions, with no systematic commitment	Level 3 Institutional commitment to reduction disaster risk, but no substantial progress	Level 4 Systematic commitment at policy level, but insufficient resource allocation	Level 5 Full achievement with sustained commitment
10.1 Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programmes	No disaster preparedness plans and programmes elaborated for disaster prone areas	Some initiatives for elaborating and institutionalizing disaster preparedness plans and programme, but with poor technical quality and scarce institutional participation	Preparedness plans elaborated at some geographical levels, but only for response without considering risk reduction and relevant mitigation actions. No evaluation and update. No regular drills and rehearsals being done to test and develop disaster response programmes.	Disaster preparedness plans of good quality in different geographical levels and sectors elaborated, but not monitored or updated. Limited drills and rehearsals being done to test the plans.	Disaster preparedness plans elaborated at all levels with good technical quality, involving the participation of response and development bodies. Permanently evaluated and updated. Regular training drills and rehearsals are held to test and develop disaster response programmes.

Indicator 11 Assessment Criteria

Indicator	Level 1 No progress has been made and/ or progress has stopped or moved backwards	Level 2 Minor progress achieved in disaster risk reduction actions, with no systematic commitment	Level 3 Institutional commitment to reduction disaster risk, but no substantial progress	Level 4 Systematic commitment at policy level, but insufficient resource allocation	Level 5 Full achievement with sustained commitment
11.1 All organizations, personnel and volunteers in the preparedness system possess the required technical capacity to carry out essential elements and tasks for effective disaster response	No programme implemented for improving technical capacity to carry out essential elements and tasks for effective disaster response	Some isolated programmes with limited coverage implemented for improving technical capacity for effective disaster response	National and local efforts for improving technical capacity made through programmes covering a broad range of actors (personnel, volunteers and organizations), but not institutionalized	Relevant progress made for establishing and implementing programmes for improving technical capacity on preparedness oriented to a wide range of actors (organizations, personnel and volunteers), but efforts need to be made	Sufficient technical capacity of organizations, personnel and volunteers in the preparedness system for carrying out essential elements and task for effective disaster response
11.2 Independent Assessment of disaster preparedness capacities and mechanisms have been undertaken in the last 12 months and responsibility for implementation of recommendations assigned and resourced	No assessment undertaken on disaster preparedness capacities and mechanisms undertaken in the last 12 months	Some advances on assessment of disaster preparedness capacities and mechanisms undertaken in the last 12 months at some geographical levels, but no mechanisms and responsibilities established	Progress on assessment of disaster preparedness capacities and mechanisms achieved at national and some local levels in the last 12 months, but implementation limited due to lack of resources and coordination	Relevant progress in assessment of disaster preparedness capacities and mechanisms in the last 12 months and in the implementation of recommendations, but insufficient geographical coverage	Wide updated independent assessment of disaster preparedness capacities and mechanisms frequently executed in the last 12 months and recommendations implemented by responsible

PoA Additional Target 5 Substantially increase the number of regional networks or partnerships for knowledge management and capacity development, including specialized regional centres and networks

Indicator	Indicator Key Elements	Key Question(s)	Means of verification
12. Number of regional networks or partnerships for DRR knowledge management and capacity development	▪ Network or partnerships for knowledge management and capacity development established and operational ▪ Sub-regional specialized Centres for disaster risk reduction established as appropriate, with ownership and adequate resource allocation.	· Are there regional networks or partnerships for DRR knowledge management and capacity development?	
13. Number of specialized DRR regional centres and networks established and operational			

Indicator 12 Assessment Criteria

Indicator	Level 1 No progress has been made and/ or progress has stopped or moved backwards	Level 2 Minor progress achieved in disaster risk reduction actions, with no systematic commitment	Level 3 Institutional commitment to reduction disaster risk, but no substantial progress	Level 4 Systematic commitment at policy level, but insufficient resource allocation	Level 5 Full achievement with sustained commitment
12.1 Network or partnerships for DRR knowledge management and capacity development established and operational,	No regional networks or partnerships for DRR knowledge management and capacity development	Some initiatives for establishing regional networks or partnerships started, but still not yet developed.	Progress on establishment of regional networks or partnerships achieved, but implementation limited due to lack of resources and coordination.	Sufficient progress in establishing regional networks or partnerships achieved, but insufficient geographical coverage due to limited resources. Coverage and objectives of the regional networks or partnerships clearly defined.	Regional networks or partnerships for knowledge management and capacity development established and operational, including Sub-regional specialized Centres for disaster risk reduction as appropriate, with ownership and resource allocation.

Indicator 13 Assessment Criteria

Indicator	Level 1 No progress has been made and/ or progress has stopped or moved backwards	Level 2 Minor progress achieved in disaster risk reduction actions, with no systematic commitment	Level 3 Institutional commitment to reduction disaster risk, but no substantial progress	Level 4 Systematic commitment at policy level, but insufficient resource allocation	Level 5 Full achievement with sustained commitment
13.1 Sub-regional specialized Centres for disaster risk reduction established as appropriate, with ownership and adequate resource allocation.	No sub-regional specialized centres for disaster risk reduction	Some initiatives for establishing regional specialized sub-regional centres started, but still not yet developed.	Progress on establishment of regional specialized centres achieved, but implementation limited due to lack of resources and coordination.	Sufficient progress in establishing regional specialized centres achieved, but insufficient geographical coverage due to limited resources. Coverage and objectives of the regional specialized centres clearly defined	Regional specialized centres established and operational with adequate resource allocation. Ownership of the centres clearly defined.

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