

# Africa and MENA Regions (2021)

*Nicholas Wasonga Orago\**

## 1 Introduction

Africa and the MENA Regions continue to face the bulk of disaster risks due to the generally high level of exposure, vulnerability, and limited socio-economic capacity to address disaster risks and respond effectively to the adverse effects of climate change. As a result, there are very high levels of human and economic losses, specifically when hazards occur in the context of the exposure and vulnerability of people, livelihoods, infrastructure, and socio-economic investments. This section looks at the disaster situation in the two regions and the efforts that regional, national, and local actors are putting in place for effective disaster risk reduction so as to reduce instances of disaster losses and damage.

## 2 Disasters in the MENA Region in 2021 and Efforts of Governmental and Intergovernmental Institutions to Address Them

### 2.1 *The Disaster Situation in MENA Region in 2021*

The MENA Region continued to be the crucible of extreme weather events in the year 2021, with several disasters being recorded. The increasing summer temperatures at twice the global average in the region due to climate change saw the summer of 2021 as hotter than any previous summer across the Middle East, with temperatures being almost 7 degrees Celsius higher than usual for the time of the year.<sup>1</sup> In June–July 2021, Kuwait recorded summer temperatures of 53.2 degrees Celsius, while Oman, the United Arab Emirates, Saudi Arabia, Iran and Iraq all recorded temperatures of over 50 degrees Celsius.<sup>2</sup> The increasing temperatures have/led to droughts and desertification affecting

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\* Senior Lecturer, University of Nairobi Faculty of Law and Founding Member of the African Human Rights and Climate Justice Centre.

1 Jennifer Holleis, 'Middle East: Running out of water' (DW Middle East 24 January 2022) <<https://www.dw.com/en/middle-east-running-out-of-water/a-60509788>>, last accessed (as any subsequent URL) on 12 July 2022.

2 Anchal Vohra, 'The Middle East is becoming literally uninhabitable' Foreign Policy 24 August 2021 <<https://foreignpolicy.com/2021/08/24/the-middle-east-is-becoming-literally-uninhabitable/>>.

water supplies (quantity and quality)<sup>3</sup> and food production systems, with over 12 million people affected in Iraq, Syria, Jordan and Iran.<sup>4</sup> The high temperatures have created the possibility of heatwaves in the Middle East, with consequences such as heat strokes and heat exhaustion expected to adversely affect vulnerable populations such as the elderly, pregnant women, children and those with respiratory illnesses. These high temperatures have also threatened governmental stability in the Middle East, with protests and demonstrations being experienced in fragile countries like Iraq, Iran, and Lebanon due to a lack of water and electricity as well as high costs of basic necessities.<sup>5</sup>

Due to high temperatures of over 47 degrees Celsius, forest fires lasting for a period of six days affected Northern Algeria (more than 70 fires in 13 prefectures) from 9 to 15 August 2021, burning an area of 29,884 ha, affecting over 97,533 people and leading to the death of over 69 people, including 28 members of the Armed Forces deployed to manage the fire.<sup>6</sup> The intensity and extensiveness of the fire forced the Algerian Government to request assistance from the international community to manage the fires, including through the EU Civil Protection Mechanism.<sup>7</sup> On 14 November 2021, due to the prevailing high temperatures and high wind speeds, wildfires were recorded in several Lebanese towns, including close to the Capital City, Beirut, leading to the death of at least one person, the destruction of unquantified infrastructure and homes, as well as damage to the environment and loss of biodiversity.<sup>8</sup> The wildfires forced the Lebanese Prime Minister to deploy the Army to support the civil defence forces that had been overwhelmed by the fire catastrophe. Other places affected by wildfires in 2021 include Morocco, where 285 fires between January and September affected a total of 2,782 ha of forests, a decline of 47%

3 Extreme temperatures affect water quality as it increases salinity of fresh water and enhances water pollution, see European Union Institute of Security Studies (EUISS) 'Arab climate futures: Of risks and readiness' (October 2021) <[https://www.iss.europa.eu/sites/default/files/EUISSFiles/CP\\_170.pdf](https://www.iss.europa.eu/sites/default/files/EUISSFiles/CP_170.pdf)>.

4 Rand Alaaldin, 'Climate change may devastate the Middle East. Here is how governments should tackle it' Brookings Planet Policy (14 March 2022) <<https://www.brookings.edu/blog/planetpolicy/2022/03/14/climate-change-may-devastate-the-middle-east-heres-how-governments-should-tackle-it/>>.

5 Vohra (n 2).

6 Global Disaster Alert and Coordination System (GDACS), 'Forest fire in Algeria' (16 August 2021) <<https://www.gdacs.org/report.aspx?eventid=1001892&episodeid=6&eventtype=WF>>.

7 ECHO, 'Algeria: Wild Fires – August 2021' (11 August 2021) <<https://reliefweb.int/disaster/wf-2021-000115-dza>>.

8 Nadda Osman, 'Earthquakes, floods, wildfires and a scorpion plague: The Middle East's weekend of climate chaos' Middle East Eye (15 November 2021) <<https://www.middleeasteye.net/news/middle-east-earthquakes-floods-wildfires-scorpions-weekend-climate-chaos>>.

as compared to the damage occasioned by wildfire in 2020; and Tunisia, where in July 2021 wildfire destroyed over 1,000 Hectares of forest land.<sup>9</sup>

Apart from the increasing temperatures, the Middle East has also been affected by other catastrophes. On 3 October 2021, a 150km/h Cyclone Shaheen made landfall in Northern Oman and Iran with torrential rains, flooding and landslides in Oman and dust storms in Iran, leading to the death of at least 13 people in Oman and at least six people in Iran, with a further 122 people being treated due to the adverse effects of the dust storm in Iran.<sup>10</sup> In Egypt, heavy rains (heaviest in seven years), severe thunderstorms and flash floods in the Southern City of Aswan on 12 November 2021 led to the death of at least 3 people through electrocution and caused a deadly mass infestation of Deathstalker scorpions into people's homes with over 400 people stung.<sup>11</sup> The thunderstorm and flooding led to the partial and total destruction of at least 103 homes. The heavy thunderstorms that reduced visibility led to a governmental order for people to shelter in their homes, with schools being closed to protect students/learners from adverse weather.<sup>12</sup>

Apart from the extreme weather events resulting from climate change, traditional disasters such as earthquakes were also recorded in the MENA Region, with two earthquakes of magnitudes 6.3 and 6.4 hitting Southern Iran and leading to the death of one person and the evacuation of others from their homes.<sup>13</sup> These disasters continued to occur in the context of the COVID-19 pandemic, with a total of 10,507,749 cases being reported by July 2021, leading to 197,722 deaths.<sup>14</sup>

## 2.2 *Efforts by Governmental and Intergovernmental Institutions to Address Disasters in the MENA Region in 2021*

There have been efforts by different actors at the regional and national levels to respond to the hazard risks in the MENA Region in 2021. The League of

9 *Ibid.*

10 Associated Press, 'Cyclone Shaheen hits Oman and Iran, causing flooding and death' (4 October 2021) <<https://www.theguardian.com/world/2021/oct/04/cyclone-shaheen-hits-oman-and-iran-causing-flooding-and-deaths>>.

11 Middle East Eye, 'Egypt: Thunderstorms cause deadly scorpion infestation in Aswan' (13 November 2021) <<https://www.middleeasteye.net/news/egypt-thunderstorms-deadly-scorpion-infestation-aswan>>.

12 *Ibid.*

13 Nadda Osman, 'Earthquakes, floods, wildfires and a scorpion plague: The Middle East's weekend of climate chaos' Middle East Eye 15 November 2021 <<https://www.middleeasteye.net/news/middle-east-earthquakes-floods-wildfires-scorpions-weekend-climate-chaos>>.

14 *Ibid.*

Arab States established the Arab Coordination Mechanism for Disaster Risk Reduction as the official institutional framework for managing disaster risks in the MENA Region. It brings together governments at the highest level, technical experts and other stakeholders in partnership and collaboration in making decisions, developing operational plans, evaluating disaster risks, and coordinating the implementation of disaster risk management activities at the regional, national, and local levels in the region. UNDRR virtually convened the 6th Arab Partnership Meeting for Disaster Risk Reduction (DRR) on 30 June and 1 July 2021, which was attended by representatives of 16 Arab countries as well as key DRR stakeholders in the region.<sup>15</sup> Critical issues for discussion were the progress in implementation of the second phase of the Arab Strategy for Disaster Risk Reduction 2030 as the main tool for addressing the priority disaster risk intervention in the region between the periods 2021 to 2024. The Meeting also provided a critical planning session for the 5th Arab Platform for DRR, which was scheduled to be held later in 2021. It defined the expected outcomes for the 5th Arab Platform on DRR as: strengthening political commitments to hazard risk management, resilience building and disaster risk reduction, as well as the adoption of the Prioritised Action Plan 2021–2024 that was being finalised at the Meeting.

The 5th Arab Platform for DRR was held on 8–11 November 2021, hosted by Morocco under the theme: From Risk to Resilience: Accelerating Local Action for Disaster Risk Reduction. The Platform, attended by 16 countries, 100 experts and 500 delegates, acknowledged the increasing frequency of hazards in the region with increased human and economic losses resulting from these hazard occurrences.<sup>16</sup> The deliberations in the Platform led to the adoption of the Rabat Declaration on Disaster Risk Reduction, which called on the regional adoption of an integrated approach that aligns disaster risk reduction strategies and programmes with sustainable development policies at all levels of development.<sup>17</sup> The Declaration calls for a paradigm shift from disaster risk management to more comprehensive and risk-resilient development practice. There was a general political and technical commitment from Delegates of the Platform for the implementation of the recommendations of the Rabat Declaration through the Arab Coordination Mechanism and UNDRR. This

15 UNDRR, '6th Arab Partnership Meeting for Disaster Risk Reduction' (4 July 2021) <<https://rp-arabstates.undrr.org/news/6th-arab-partnership-meeting-disaster-risk-reduction>>.

16 UNDRR, 'Regional Assessment Report on Disaster Risk Reduction in the Arab Region 2021' (11 November 2021) <<https://reliefweb.int/report/world/regional-assessment-report-disaster-risk-reduction-arab-region-2021-enar>>.

17 *Ibid.*

commitment was affirmed by the Assistant Secretary General of the Economic Affairs for the League of Arab States as follows:<sup>18</sup>

[T]his declaration is a roadmap for raising awareness, building capacity, and working with international mechanisms in relation to disaster risk reduction, as well as a tool for strengthening national strategies.

It is hoped that the requisite goodwill and financing will continue to be availed for the effective implementation of the Rabat Declaration for enhanced risk resilience and disaster preparedness in the MENA Region.

Apart from the Declaration, the Arab DRR Platform also saw the launch of the Arab Regional Assessment Report on Disaster Risk Reduction 2021. The Report offers an update on the regional efforts in the implementation of the Sendai Framework goals, targets and priorities in the Region. It undertakes a comprehensive analysis of region-specific systemic drivers of hazard risks, as well as defines entry points for improving coherence and coordination with climate change adaptation and sustainable development frameworks in the region. The Report advocates a risk-informed approach to development that is critical to ensuring the sustainability of investments and efficient resource use. The expectation of UNDRR and other stakeholders is that the Report becomes a go-to guide for regional, national, and local level partners in reducing existing disaster risks, preventing the creation of new risks, and building long-term hazard resilience.<sup>19</sup>

### 3 Disasters in the Africa Region in 2021 and Efforts by Governmental and Intergovernmental Institutions to Address Them

#### 3.1 *The Disaster Situation in the Africa Region in 2021*

Africa, like the Middle East, has also continued to bear the brunt of natural catastrophes, with many of these being climate-induced slow-onset and rapid extreme weather events such as severe droughts, storms, floods, landslides, and cyclones, among others. Resulting from the driest conditions and hottest temperatures since satellite record-keeping began, the Horn of African countries of Somalia, Ethiopia, Kenya and Eritrea are currently facing a concurrent four-season drought, the worst drought to have hit the region in the

18 *Ibid.*

19 *Ibid.*

last 40 years. This has led to severe water, pasture, and food scarcity and adversely affected lives, livelihoods and socio-economic wellbeing of over 20 million people.<sup>20</sup> The severe drought has led to the Governments of Kenya and Somalia declaring national emergencies, as well as humanitarian agencies warning of dire consequences if action is not taken to avert famine.<sup>21</sup> The drought has instigated desperate survival measures with communities and households tracking over long distances to find water and pasture for human and livestock survival, with the resulting competition in the places of migration leading to resource-based and inter-communal tensions and conflict. The drought has led to the death of over 3 million livestock in the region and led to the displacement of over 13 million people who have moved in search of water, pasture and food.<sup>22</sup> The food security situation in the region, affected by other factors such as insecurity, conflict and extremism, has been compounded by the fallout from the Russia-Ukrainian war that has led to a global increase in food and fuel prices and affected international food supply chains.

In Southern Africa, the cyclone menace continued, with Cyclone Eloise making landfall in Mozambique on 23 January 2021 with winds of up to 160 km/h accompanied by torrential rains (250 mm of rain in 24 hours) and severe flooding, leading to the destruction of farmlands, vital infrastructure and settlements.<sup>23</sup> The cyclone affected 441,690 people, caused 11 deaths and led to the destruction of over 8,000 homes.<sup>24</sup> The cyclone impacted Madagascar directly, affecting over 2,800 people, killing one person and destroying over 50 houses; and also reached South Africa as a tropical storm with winds of up to 83 km/h, occasioning heavy rains and flooding that affected over 3,200

20 UNEP, 'On verge of record drought, East Africa grapples with new climate normal' (28 March 2022) <<https://www.unep.org/news-and-stories/story/verge-record-drought-east-africa-grapples-new-climate-normal>>; UNICEF, 'Regional call to action: Drought in the Horn of Africa' (February 2022) <<https://www.unicef.org/esa/media/10491/file/UNI-CEF-Regional-CTA-HoA-Drought-2022.pdf>>.

21 ON-OCHA, 'Horn of Africa drought: Humanitarian key messages' (22 March 2022) <[https://reliefweb.int/sites/reliefweb.int/files/resources/20220323\\_RHPT\\_KeyMessages\\_HornOfAfricaDrought\\_Update.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/20220323_RHPT_KeyMessages_HornOfAfricaDrought_Update.pdf)>.

22 Oxfam, 'As many as 28 million people across East Africa at risk of extreme hunger if rains fail again' (22 March 2022) <<https://www.oxfam.org/en/press-releases/many-28-million-people-across-east-africa-risk-extreme-hunger-if-rains-fail-again>>.

23 UNICEF, 'Communities in Mozambique devastated by Cyclone Eloise' (no date) <<https://www.unicef.org/stories/communities-mozambique-devastated-cyclone-eloise>>.

24 UN-OCHA 'Tropical Cyclone Eloise – Jan 2021' 20 May 2021 <<https://reliefweb.int/disaster/tc-2021-000008-moz>>.

people and led to the death of at least four people.<sup>25</sup> South Africa was further impacted by Thunderstorms and extreme flooding in December 2021 and January 2022 in the Eastern Cape, leading to the death of over 80 people, displacing over 1.762 households and causing extensive damage to property, infrastructure and the environment – with the catastrophe being officially declared as a national disaster by the Government of South Africa.<sup>26</sup> Other Southern African Countries that suffered flooding catastrophes include Namibia, Zambia, Zimbabwe and Malawi.<sup>27</sup>

Central and Western Africa, on the other hand, have largely faced flooding catastrophe that has impacted the Democratic Republic of Congo, Gambia, Niger, Chad, Nigeria, Togo, Republic of Congo, the Central African Republic and Ghana affecting over 669.000 people and leading to the death of over 192 people, injuries to over 300 people, displacement of over 70.350 people and destruction of over 77.000 houses.<sup>28</sup> Central Africa also experienced a volcanic eruption on 22 May 2021. Mt. Nyiragongo erupted, spewing lava, volcanic ash, and smoke into neighbouring towns, leading to the death of 32 people and displacement of over 450.000 people.<sup>29</sup>

### 3.2 *Efforts by Governmental and Intergovernmental Institutions to Address Disasters in the Africa Region in 2021*

Early warning is at the core of effective disaster preparedness and response, and the African Union (AU) and other supportive global and regional inter-governmental organisations have made an effort to develop and integrate early warning systems in the continent. In order to achieve the objectives of this vision, the AU and UNDRR organised a regional Multi-Hazard Early Warning/Early Action Conference on 20–22 October 2021 in Nairobi for the appraisal, discussion and validation of the continental Multi-Hazard Early Warning and Early Action Framework as well as to start the development of the Framework's Standard Operating Procedures.<sup>30</sup> The framework pro-

25 *Ibid.*

26 UN-OCHA, 'South Africa: Severe thunderstorms – December 2021' (20 January 2022) <<https://reliefweb.int/disaster/ot-2021-000210-zaf>>.

27 *Ibid.*

28 UN-OCHA, 'South Africa: Severe thunderstorms – December 2021' (20 January 2022) <<https://reliefweb.int/disaster/ot-2021-000210-zaf>>.

29 UN-OCHA, 'DR Congo: Volcano Nyiragongo – May 2021' (5 November 2021) <<https://reliefweb.int/disaster/v0-2021-000059-cod>>.

30 UNDRR, 'African experts validate institutional framework for multi-hazard early warning systems and early action' 22 October 2021 <<https://www.preventionweb.net/news/african-experts-validate-institutional-framework-multi-hazard-early-warning-systems-and-early>>.

vides operational guidance on a multi-sectoral and multi-agency disaster early warning/early action coordination across the continent and also advocates disaster risk information and data sharing by all continental actors. The Regional Director of UNDRR Africa, Mr. Amjad Abbashar, noted the importance of the Conference and the draft Framework as follows:

This is a fundamental milestone towards building the resilience of African countries and people. The framework establishes a chain of responsibility to ensure the EWS is functional, from data collection to the generation of early warning messages, leading up to the activation of prevention and mitigation measures which are fundamental for life-saving and for reducing disaster loss and damage. The important agreement reached today also underlines the solidarity principle according to which all relevant institutions and actors across the continent, from the AUC to the RECS and the Member States, commit to mutual support in the face of disaster risk reduction.<sup>31</sup>

The Conference noted that the essence of the framework was to lead to the establishment of a standardised and multi-faceted approach to early warning that encompasses the unique needs of the countries in the continent.<sup>32</sup> The Africa Framework for Multi-Hazard Early Warning and Early Action and its Delivery Programme 2022–2030 was endorsed by the AU Executive Council in its 40th Ordinary Session held on 2–3 February 2022 in Addis Ababa, Ethiopia.

The African Union is making efforts to achieve the vision of the Institutional Framework by putting in place the necessary institutional mechanisms for disaster early warning and early action in the continent and making an effort to integrate them. In this context, the AU, with the support of the Italian Government, has developed the Africa Road Map for Improving the Availability, Access and Use of Disaster Risk Information for Early Warning and Early Action, including in the Context of Transboundary Risk Management, which seeks to shift from managing disasters to managing risks.<sup>33</sup> The Road Map is based on the four traditional elements of early warning: risk knowledge; monitoring and forecasting; dissemination and communication; and preparedness and response, and it aims to enhance the capacity for data exchange and

<sup>31</sup> *Ibid.*

<sup>32</sup> *Ibid.*

<sup>33</sup> UNDRR & IISD, 'Disaster Risk Reduction Bulletin' (22 November 2021) <[https://afrr.undrr.org/sites/default/files/2021-12/8th\\_africa\\_regional\\_drr\\_o.pdf](https://afrr.undrr.org/sites/default/files/2021-12/8th_africa_regional_drr_o.pdf)>.



coordination among national, regional, and continental actors.<sup>34</sup> In order to achieve these objectives of the Road Map, the AU, with the support of the Italian Government, established the Africa Multi-hazard Early Warning and Early Action Systems (AMHEWAS) Situation Room for disaster risk reduction in Addis Ababa.<sup>35</sup> The main functions of AMHEWAS have been indicated as: coordinating transboundary DRM and emergencies; receiving and developing situation event reports from AU Member States; apprising AUC organs of ongoing disasters and emergencies at the continental level; providing early warning information to Member States; and activating the continental emergency approach. AMHEWAS has been interlinked with the Disaster Operations Centre (DOC) situation room housed at the IGAD Climate Prediction and Applications Centre (IGAD/ICPAC) in Nairobi, and the multi-advisory situation room located in Niamey, Niger, at the African Centre of Meteorological Applications for Development (ACMAD) for integrated continental early warning for effective management of disaster risks.<sup>36</sup> The essence of this integrated approach is to achieve the vision of the African Union of enhancing the availability, access and use of disaster risk information for early warning and early action in all the sub-regions of the continent.

The African Union, in collaboration with UNDRR, held the 8th Africa Regional Platform for Disaster Risk Reduction and the Seventh High-Level Meeting on DRR on 16–19 November 2021 in Nairobi that was themed ‘Towards Disaster Risk-Informed Development for a Resilient Africa in a COVID-19 Transformed World’.<sup>37</sup> The Platform was attended by 750 delegates from different governments, intergovernmental organisations, regional economic communities, and international and national non-governmental organisations, among others. The Platform noted that disaster risk, exposure and vulnerability were increasing in Africa and becoming multi-dimensional,<sup>38</sup> but also highlighted the general change in approach and practice from disaster response to hazard risk management in the continent. On this basis, the Platform noted the efforts

34 *Ibid.*

35 African Union, ‘Africa Marks a Turning Point Towards Addressing Disasters Through its Multi-Hazard Early Warning and Action Systems Situation Room’ (28 February 2022) <<https://au.int/en/pressreleases/20220228/africa-marks-turning-point-towards-addressing-disasters-through-its-multi>>.

36 *Ibid.*

37 *Ibid.*

38 The AU DRR Coordinator, Gatkuoth Kai, indicated that more was needed to be done in implementing the Sendai Framework and its PoAs with priority given to making DRR and resilience a development priority in the continent, establishing early warning systems at all levels and institutionalizing DRR at all levels of governance.

that were being made in the continent towards the achievement of disaster resilience, but also noted the challenge of financing that still bedevils Africa in disaster risk reduction and called on the African States to increase their annual budgetary allocations for the implementation of DRR strategies, programmes and plans of action.

In further improving the legal framework for DRR in the continent, African Ministers and Heads of Delegation attending the Platform adopted a new Matrix of the Programme of Action for Implementation of the Sendai Framework for DRR in Africa, covering phase II of the Programme of Action, from 2021–2025.<sup>39</sup> The Regional Platform was preceded by several side events on 16 November 2021, the most critical one being the Mid-Term Review of the Sendai Framework. It was noted that African Governments were scheduled to undertake this review between 2021–2022 as a retrospective and prospective review, with the main objective of the review being stated as: taking stock of implementation for the period 2014–2023; assessing progress and challenges; highlighting new and emerging issues; and identifying changes in context since 2015. It was noted that the review was important to understand prevailing challenges, identify opportunities and adopt best practices in the implementation of the Sendai Framework in Africa for better disaster risk reduction for sustainable development. Another side event on Disaster Monitoring using the Sendai Framework Monitor noted that at least 18 countries were reporting using the Monitor, but that the progress was slow due to insufficient institutional capacity, lack of data sharing and the endemic lack of financing for DRR in the continent. It was recommended that they should be training and capacity building to enhance the available in-country capacity for reporting using the Monitor.<sup>40</sup>

The African Union also developed a framework to respond to the COVID-19 pandemic, a COVID-19 Recovery Framework for Africa that is aimed at harnessing a collective approach to addressing the economic and human impacts of the pandemic; providing guidance to AU Member States in planning and implementing short, medium and long-term recovery strategies/plans; and putting in place a transformational agenda for addressing current and future systemic challenges in the continent.<sup>41</sup> Some of the strategies that will be detailed in this Recovery Framework include health systems reforms, sustainable financing for economic recovery, and investing in accelerated human capital development.

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39 UNDRR DRR Bulletin (n 33).

40 *Ibid.*

41 *Ibid.*

#### 4 Conclusion

The two regions continue to suffer exponentially from disaster damage and losses, an indication that despite the efforts that have been expended by different institutions to address disaster exposure and vulnerability, there is more that is still needed to build resilience and ensure that local communities are capable to effectively address disaster risks and reduce the adverse impacts of climate and other hazard catastrophes.