Cyclones Idai and Kenneth in Southeastern Africa: Humanitarian and Recovery Response in Brief

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Overview

Cyclone Idai—a large and powerful Category 2 tropical storm—came ashore on March 14, 2019, at Beira, a low-lying port city in central Mozambique, causing widespread devastation in southeastern Africa. A second strong storm, Cyclone Kenneth, came ashore on April 25 just north of the coastal town of Pemba in far northern Mozambique. Cyclone Kenneth featured winds as strong as 140 miles per hour (mph) and was classified as a Category 4 storm. Although Cyclone Kenneth made landfall in an area of Mozambique where cyclones rarely come ashore, it was reportedly the strongest recorded tropical storm ever to hit the country.¹

Cyclone Idai, dumped torrents of rain over large parts of Mozambique, Malawi, Zimbabwe, and Madagascar, causing extensive flooding, mudslides, and at least one dam collapse. It also featured strong, sustained, and destructive winds, and caused widespread damage to buildings, infrastructure, and crops.² Cyclone Idai’s impact was extensive, covering at least 1,200 square miles; it is among the worst recorded natural disasters to hit the region.³ The storm displaced large numbers of people, many of whom are now in need of humanitarian assistance, as well as significant resources for recovery and reconstruction. Post-storm aid responses have been expanding. They have shifted from an initial focus on search and rescue to the provision of emergency food aid, shelter, and health care; efforts to enable access to clean water, sanitation, and hygiene (WASH); and other humanitarian interventions.

As of April 29, initial assessments of the impact of Cyclone Kenneth were being conducted, as heavy rains from the storm continued. As of April 29, the government had attributed 38 deaths to the storm. It also reported that 20,720 displaced persons were being hosted in 30 public shelters and that extensive damage had been caused to school facilities and public clinics. An initial 15,000 persons had reportedly been rendered homeless as of April 26.⁴ Pre-storm evacuations helped avert some danger to local residents. Before hitting Mozambique, the cyclone battered the Comoros Islands, a country off the Mozambican coast, where extensive property damage and at least three deaths were reported. In Mozambique, wind projections just before the storm made landfall suggested that Cyclone Kenneth’s high winds would impact nearly 750,000 persons—a significant population, but a smaller one than was impacted by Cyclone Idai, given relatively low population densities in much of the affected region. As much as 20 inches of rain associated with

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² Following a period of seasonal rainstorms, the mid-March weather system that became Idai formed as a tropical depression off the Mozambican coast. It turned inland, circling over southern Malawi and central Mozambique, where it dropped large amounts of rain, causing flooding and ground saturation. It then turned back over the ocean, where it picked up power offshore, growing into the destructive storm that slammed into Beira and beyond. P. Probst and A. Annunziato, Tropical Cyclone Idai: Analysis of the Wind, Rainfall and Storm Surge Impact, European Commission Joint Research Centre, April 9, 2019.


Cyclone Kenneth was expected to fall over a wide zone, including the northern cities of Nampula and Nacala, and southern coastal Tanzania. Extensive flooding in affected areas is projected.\(^5\)

On April 26, the U.S. Ambassador to Mozambique declared a disaster in response to Cyclone Kenneth, authorizing the U.S. government to help respond to humanitarian needs attributable to the storm. The focus of potential U.S. Cyclone Kenneth-related assistance has yet to be determined, although the partially U.S.-funded World Food Program (WFP) pre-positioned some food stocks and made limited anticipatory food distributions in advance of the storm. Representatives of the U.S. Agency for International Development (USAID)—the primary U.S. government cyclone response-coordinating agency—are currently assessing needs in the areas affected by Cyclone Kenneth. They anticipate that initial needs identified in such areas will be met primarily through re-purposing commodities slated for response to previous displacement needs in northern Mozambique, a geographic expansion of U.S.-supported supply chains and assistance efforts already in place to respond to Cyclone Idai. This initial assistance in areas hit by Cyclone Kenneth is also expected to be supplemented with emergency food and nonfood assistance items brought in from outside the country. The U.S. mission to the cyclone-affected Comoros is also assessing post-cyclone disaster response needs in that country.\(^6\)

**Cyclone Idai: Impacts and Storm Damage**

As of April 25, the officially reported death toll from Cyclone Idai stood at 1,006 (603 in Mozambique, 344 in Zimbabwe, and 59 in Malawi).\(^7\) The final death toll is likely to be far higher; more bodies have been discovered as the water has receded and many people have been reported missing. Many of those who perished may never be discovered, as many bodies were washed down rivers in remote areas or into the sea. Bodies discovered in isolated rural areas may never be counted, as they are being buried on the spot due to a lack of mortuaries and other resources necessary to preserve bodies.\(^8\)

In Mozambique, the government and U.N. agencies estimated that 1.85 million people in storm-affected areas, including 92,500 pregnant or lactating women, were in need of humanitarian assistance as of March 26, when they launched an aid funding appeal. As of April 5, nearly 130,000 Mozambicans remained housed in public shelters. In Malawi, the government and U.N. Office for the Coordination of Humanitarian Affairs (UNOCHA) estimated that as of March 23, 868,900 persons were affected, of whom 86,980 were displaced and 731,879 in need of assistance. In Zimbabwe, UNOCHA reported that as of March 27, there were 270,000 people affected and in need of assistance.\(^9\)

\(^5\) On April 23, the U.N. Institute for Training and Research (UNITAR), estimated that 747,035 persons were in the cyclone’s 60 kilometer per hour (kph, or 37.3 mph) wind zone, and that 239,650 persons within this population were located in zones likely to be affected by winds of 90 kilometer per hour (55.9 miles per hour) or higher. UNITAR/UNOSAT, *Tropical Cyclone Twentyfour-19 Population Exposure Analysis in Mozambique*, April 23, 2019.

\(^6\) CRS communications with USAID, April 26 and 29, 2019.


Intense cyclone winds caused extensive damage to private housing and public infrastructure— notably hospitals, clinics, schools, and electrical, road, and bridge systems. In Mozambique, the cyclone destroyed or severely damaged up to 90% of Beira’s housing and infrastructure (see Figure 1).

**Figure 1. City of Beira: Flood Extent and Damage as of March 26, 2019**

The destruction has hindered post-storm access to education and health care facilities and disrupted economic activity in affected regions. Food price inflation initially spiked rapidly in Beira, but local market activity has picked up; the increasing availability of goods is likely to curtail price rises. The cyclone hit at the start of the main harvest period and damaged or destroyed 1.7 million acres of crops in Mozambique, a perilous outcome in a region where local communities rely on subsistence farming. As a result, rates of food insecurity and food aid needs are likely to be high for several months. Livestock losses have also been extensive.10

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Rainfall from the cyclone inundated low-lying areas and generated mudslides and powerful riverine flash floods. These effects were worsened by pre-cyclone rains. Beira was hit by a storm surge as high as 4.5 meters. A March 17 dam collapse near Beira also aggravated flooding in the city. The potential collapse of other upstream dams in the region could pose a threat, but they have been slowly draining. Flooding has contaminated local water sources in the affected region, where access to improved sanitation and clean water is generally low, and outbreaks of water-borne diseases are common. As of April 25, more than 6,600 cases of cholera had been reported in Mozambique in the weeks since Cyclone Idai, along with thousands of cases of acute watery diarrhea. Zimbabwe has also experienced cases of cholera, as well as typhoid. Rates of malaria, an endemic disease, could also spike as water pools, creating mosquito breeding grounds.11

**Humanitarian Operations**

In partnership with national governments, international organizations and nongovernmental organizations (NGOs) have been carrying out a multifaceted humanitarian response (see Figure 2 for U.S.-funded assistance in areas affected by Cyclone Idai). These actions initially centered on emergency rescues aided by Indian, South African, and Portuguese military units, assessments of impact and need, and the initiation of logistical operations. The response has since largely transitioned toward other relief activities, including deliveries of food, shelter and nonfood items for the displaced, and provision of health care.12

Initial food aid responses included World Food Program (WFP) airdrops of high-protein biscuits to inaccessible areas. Conventional food aid commodity flows sourced regionally have since begun. The WFP plans to supply food aid (provided in-kind or through end-user market purchases using vouchers or cash distributions) for 1.7 million affected people over several months, and was reaching about one million people as of mid-April.13

Health aid responses led by the World Health Organization (WHO) have included the provision of 900,000 mosquito bed nets, water purification tablets, and the establishment of mobile clinics. WHO has prioritized efforts to treat diarrheal disease. It deployed a 40-member team of epidemiologists, logisticians, and disease-prevention experts and is providing 900,000 doses of oral cholera vaccine and establishing treatment centers to prevent the emergent outbreak of cholera from expanding. More than 803,000 people had been vaccinated as of April 12. Other aid has included mobile school kits and protection services for vulnerable displaced populations (e.g., action to avert sexual and child abuse and gender-based violence, and to address the needs of the elderly and other populations of particular concern).14

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The need for protection assistance, as well as for transparency and accountability in aid distributions, was underlined by allegations of misconduct by local officials involved in the provision of cyclone assistance. On April 25, Human Rights Watch (HRW) reported that in some instances local officials involved in food and other aid distributions at the community level were
requesting payment from recipients of food assistance, and were coercing women who could not make payment “into exchanging sex for food.” HRW also reported that female-headed households were often not being included on aid distribution lists. It urged that such allegations be investigated and punished. Following the report, UNOCHA pledged to rapidly and fully investigate such claims.\textsuperscript{15}

The response is being coordinated by U.N. agencies according to the U.N. “cluster” approach, in which aid activities implemented by U.N. and NGO implementing agencies are coordinated by major functional area (e.g., shelter, education, food security) in a sequence moving from emergency aid to early recovery and reconstruction. Access to initially unreachable areas has improved as water has receded, but access remains a challenge due to road and bridge damage. Continuing heavy rains and water flows from upstream initially slowed drainage from flooded areas, but drier weather has since prevailed.\textsuperscript{16} Initial response operations were based at Beira’s airport. This location facilitated coordination among the many responding actors but raised concerns regarding possible aid flight and warehousing congestion. Heavy reliance on and demand for air transport capacity initially created an aid delivery bottleneck. As key roads have become increasingly passable, and as Beira’s port and several railways have returned to an operational state, more local aid delivery points and displaced person reception centers have opened. Widespread destruction to telecommunication and electrical infrastructure have continued to hinder response efforts.\textsuperscript{17}

**International Humanitarian Funding Appeals**

The international community has sought to address the crisis through a range of funding pledges and appeals. As of April 5, 2019, the United States was the lead contributor to the global emergency response. Multiple other governments have also pledged assistance to specific organizations and/or functions (e.g., WASH or shelter) at the country or regional level (see Table 1). In addition to these contributions, China, France, and Brazil, among other countries have provided in-kind technical or commodity aid.\textsuperscript{18}

A number of U.N. appeals have been launched. An initial $40.8 million U.N. appeal for Mozambique in support of a range of immediate response activities was folded into a revised $282 million U.N. appeal issued on March 26. It seeks funding to assist 1.72 million of the most vulnerable Mozambicans (out of 1.85 million in need) over a three-month period ending in late June. The appeal is broken out by U.N. functional clusters. On March 29, the Malawian government and U.N. agencies launched a separate appeal for $42.3 million for Malawi, of which $14.6 million had been committed as of April 1. UNOCHA has also issued a $60 million cyclone-related appeal for Zimbabwe. Various donors had previously pledged or were providing $2.4 million to Zimbabwe, for which UNICEF has launched a separate $10 million appeal; $2.5 million in U.S. food aid has also been provided to address cyclone-related need in Zimbabwe. Individual aid agencies have also launched separate cyclone response funding appeals.\textsuperscript{19}

\textsuperscript{15} HRW, “Mozambique: Cyclone Victims Forced to Trade Sex for Food,” April 25, 2019; and Nita Bhalla, “U.N. to Probe Sex-For-Food Aid Allegations After Mozambique’s Cyclone Idai,” Reuters, April 26, 2019.


\textsuperscript{17} CRS-USAID communication, March 21, 2019; and multiple UNOCHA and WFP Logistics Cluster reports.

\textsuperscript{18} Others include Botswana, South Africa, India, Angola, Morocco, Tanzania, Japan, Russia, and Luxembourg.

Table 1. Cyclones Idai and Kenneth: Major Aid Pledges/Allocations
(March 19-April 26, 2019)

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<tr>
<th>Amount</th>
<th>Donor</th>
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<td>$66.2 million</td>
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</tr>
<tr>
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<td>United Kingdom</td>
</tr>
<tr>
<td>$26.3 million</td>
<td>Belgium</td>
</tr>
<tr>
<td>$20 million</td>
<td>U.N. emergency funds</td>
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<td>Austria</td>
</tr>
<tr>
<td>$0.4 million</td>
<td>Japan</td>
</tr>
</tbody>
</table>


The World Bank has estimated that recovery costs from Idai in Malawi, Mozambique and Zimbabwe may total $2 billion. After hosting a donor coordination meeting on the response, on April 11 the World Bank stated that it had mobilized substantial resources using existing projects in Malawi and Mozambique to provide support for urgent road and water supply repairs, sanitation and hygiene, disease surveillance and prevention, agriculture, and food security [... and would] seek access to additional resources including by working with donors to mobilize trust fund support, and by mobilizing through the International Development Association (IDA) Crisis Response Window (CRW) for medium to long-term recovery and reconstruction efforts to eligible countries.20

On March 19, 2019, the Bank also approved a $90 million grant to build the capacity of Mozambique’s Disaster Risk Management (DRM) and Resilience Program.21

On April 19, the Executive Board of the International Monetary Fund (IMF) approved a $118.2 million emergency financial assistance loan “to address large budgetary and external financing gaps arising from reconstruction needs after Cyclone Idai.”22 The assistance is drawn from the IMF’s Rapid Credit Facility (RCF), which provides concessional rapid financial assistance to


eligible low-income countries in response to economic shocks, natural disasters, and other emergencies. Mozambique’s new RCF loan is highly concessional; it is interest-free, with a 10-year repayment period and a grace period of five and a half years). The loan is notable because the IMF and the Mozambican government have been at odds over the implications of an ongoing $2 billion-plus scandal involving opaque state-guaranteed loans that were not reported to the IMF. That matter has been the focus of ongoing U.S. and Mozambican prosecutions.

**U.S. Humanitarian Response**

The United States has played a leading role in the international humanitarian response. Days after the cyclone hit, the Office of U.S. Foreign Disaster Assistance (OFDA) of USAID deployed a small assessment team to Mozambique, with an initial focus on Beira. On March 20, OFDA activated a Disaster Assistance Response Team (DART) and a U.S.-based Response Management Team. The DART, comprising 17 varied sectoral experts, has since deployed to Mozambique with a focus on assessing needs and response challenges and coordinating responses with other donors. The team’s size may fluctuate based upon response needs and challenges. OFDA personnel have also conducted needs assessments in Zimbabwe and Malawi.

USAID initially provided $700,000 in support for critical needs in Mozambique, Zimbabwe, and Malawi, with a focus on food aid, shelter, health, and WASH responses. Portions of this assistance were authorized to respond to pre-cyclone flooding. As of April 25, OFDA had increased such aid to a level of $21.5 million, an amount that includes funding for the delivery of other relief commodities and program support costs. In addition, USAID’s Office of Food for Peace (FFP) was also providing a further $38.7 million in emergency food aid. This assistance has included locally and regionally procured emergency food commodities being delivered by the World Food Program, USAID emergency food aid supplies from warehouses in Italy and the UAE, and food purchase vouchers. Most of this assistance was for Mozambique, but it included $3.75 million in aid for Malawi, primarily in the form of food for more than 205,000 internally displaced persons and affected communities, as well as $2.6 million in aid for affected populations in Zimbabwe. It is not yet clear how much of overall U.S. cyclone response assistance may comprise the U.S. response to the U.N. appeals.

On March 24, DOD announced that Acting Secretary of Defense Patrick Shanahan had authorized U.S. Africa Command (AFRICOM) to provide up to $6.5 million in DOD Overseas Humanitarian, Disaster and Civic Aid (OHDACA) account funding to support relief materials, responders, and third-party personnel for a brief period. DOD had used $6 million of this authority as of April 12, when DOD halted its Cyclone Idai operations as road access had improved and an adequate number of civilian flights were operational. DOD’s contribution, which supported needs identified by OFDA, mainly consisted of transport support in the form of eligible low-income countries in response to economic shocks, natural disasters, and other emergencies. Mozambique’s new RCF loan is highly concessional; it is interest-free, with a 10-year repayment period and a grace period of five and a half years. The loan is notable because the IMF and the Mozambican government have been at odds over the implications of an ongoing $2 billion-plus scandal involving opaque state-guaranteed loans that were not reported to the IMF. That matter has been the focus of ongoing U.S. and Mozambican prosecutions.


three C-130 aircraft and the deployment of land cruisers supporting onward local delivery. The C-130s carry large amounts of jet fuel, which allowed them to avoid relying on stretched local supplies of jet fuel. Combined Joint Task Force-Horn of Africa (CJTF-HOA), AFRICOM’s regional operational headquarters unit, led the DOD response.  

Looking Ahead: Potential Issues for Congress

As the disaster response continues, potential areas of interest for Congress include monitoring the ongoing U.S. and broader international humanitarian response and related U.S. assistance levels. Over the longer term, Congress may also seek to track disaster prevention and preparedness strategies, both with an eye toward increasing resilience and reducing the magnitude of potential future emergency response needs in the region, as well as the potential impact of the Trump Administration’s proposed consolidation of U.S. humanitarian response mechanisms.

Immediate Humanitarian Response

In the short term, Congress may seek to determine whether levels of U.S. funding for the humanitarian response in Mozambique and the region are commensurate with need, while also considering competing global crisis priorities and the larger international community’s response to Cyclone Idai. Continuing needs assessments will likely help clarify and define priorities and gaps in humanitarian programming as the response evolves, and as a transition to recovery efforts begins. Key areas at issue may include health care and disease mitigation efforts; food security needs and responses; protection needs, including prevention of sexual and gender-based violence; and longer-term issues, such as resettlement, housing reconstruction, and restoration of livelihoods.

Proposed Changes to U.S. Humanitarian Response Mechanisms

The U.S. disaster response in southeastern Africa may also inform congressional consideration of the Administration’s FY2020 budget proposal to fund all humanitarian assistance through a new, single global International Humanitarian Assistance (IHA) account, which would also fund U.S. emergency food assistance. The proposal also calls for this account to be administered by a new Humanitarian Assistance Bureau, under which several USAID offices would be consolidated.  

The impact, if any, of the proposed consolidation of U.S. humanitarian funding and reorganization on the effectiveness of U.S. disaster response efforts or the U.S. government’s relationship with implementing partners, particularly multilateral organizations, is not yet clear; nor is the way in which these changes might affect U.S. interagency disaster response coordination (such as DOD-USAID collaboration). Any changes to the U.S. humanitarian response system and related U.S. priorities could have a broader impact on global responses to similar large-scale disasters.

Disaster Prevention and Preparedness Strategies

USAID’s longer-term disaster prevention and preparedness efforts, especially in the face of possible future climate change effects, may also be of interest to many in Congress.


28 FY2020 State Department, Foreign Operations and Related Programs Congressional Budget Justification, p. 77.
Some observers believe that changing weather and climate patterns affecting southeastern Africa, such as increasing volumes of rainfall and rising global temperatures, may be associated with human-induced climate change and may increase the intensity and potential impacts of cyclones in the region. Other related effects, such as warming sea surface temperatures and rising sea levels, may also potentially contribute to increases in storm intensity and more severe damage from future cyclones. Some scientists contend, however, that potential climate change impacts are difficult to differentiate from historically high variability in storm frequency and intensity in the region. They also indicate that the effects at issue can interact in ways that can both strengthen and reduce the intensity of a given storm.²⁹

The possibility of future storms as strong or stronger than Cyclone Idai—and a long history of past intense storms—may suggest a potential need for USAID to expand its investments in resilience and disaster preparedness efforts in the region. Such programs seek to enable communities and countries, and local sectoral systems to mitigate, adapt to, and recover from recurrent natural or man-made shocks and stresses. Resilience programs typically focus on strengthening agricultural and food security systems, health care capacity, local economies, and environmental challenges.³⁰ In recent years, USAID resilience-building efforts in Mozambique have been multisectoral, with a focus on adaption to sea level rise by coastal cities, and capacity-building efforts targeting local health and agricultural systems, and conservation and management of ecological regions, such as the Limpopo River Basin.³¹

The Administration’s proposed humanitarian assistance reorganization at USAID could potentially shape the focus and scope of U.S. investments in resilience programs. One of the aims of this proposed change is to create linkages between resilience efforts and emergency relief responses, with the goal of building the capacity of communities to withstand natural disasters and other shocks, while also reducing the need for complex and costly international disaster responses. Congress may examine how any reorganization balances the goals of natural disaster prevention and mitigation efforts, on the one hand, and effective U.S. response capacity, on the other hand, in terms of funding, resources, and leadership when the scale of a given disaster—in Africa or in other regions—necessitates a large humanitarian response.


³¹ Chemonics, “Building a More Resilient Mozambique,” Coastal City Adaptation Project (CCAP), November 2013-November 2018, and “Improving Climate Change Development Programs,” Climate Change Adaptation, Thought Leadership, and Assessments (ATLAS), September 2014-September 2019; and USAID, “Mozambique’s Farmers Build Resilience in the Face of Drought” (September 19, 2017), “Climate Change and Health in Mozambique Impacts on Diarrheal Disease and Malaria” (2018), Fact Sheet: Resilience in the Limpopo Basin Program- RESILIM (June 2013), and “Disaster Response” (July 2018).
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