

**Researchers**

Dean Yang  
University of Michigan

Tanya Rosenblat  
University of Michigan

James Riddell IV  
University of Michigan

**Timeline**

2019-2020

**Sample Size**

4,694 households from 76 communities in the Manica, Sofala, and Zambezia provinces.

**Data Repository**

Published Data (Dataverse)

**Research Implemented by IPA**

Yes

# The Impact of a Health Intervention on Coping with the Aftermath of Cyclone Idai in Mozambique

## Abstract

Can public health interventions help ameliorate the negative effects of disasters? How do disasters affect individual decision-making about important health behaviors? In Mozambique, researchers are leveraging an ongoing randomized evaluation to examine whether a community-level HIV/AIDS program with risk-coping components, such as Village Savings and Loan groups, helps people cope with the aftermath of Cyclone Idai and reduce disaster-induced deterioration of health decision-making. Researchers are measuring impacts on household preferences, health behaviors, shock affectedness, resilience, and individual economic preferences.

## Policy Issue

Natural disasters have consequences that go beyond immediate destruction. Exposure to natural disasters can also lead individuals to make worse decisions related to their health, with potential consequences that last beyond the period of recovery. These impacts could be worse in marginalized populations because of their health status.

For instance, disasters can induce behavioral changes in risk aversion and time preferences, which could exacerbate disease transmission rates and impair recovery. Other consequences of disasters, including the scarcity of food or the disruption of water and sanitation,

disproportionately affect sick people and could speed up contagion rates for certain diseases. Although specialists recognize these complex relations, studies to assess these hypotheses are limited. This research aims to fill this gap by examining whether a community-level HIV/AIDS program with risk-coping components helps people cope with the aftermath of a cyclone and reduce deterioration of health decision-making.

## Context of the Evaluation

Researchers were conducting an impact evaluation of the Força à Comunidade e Crianças (FCC, "Strengthening Communities and Children") program in three provinces of Mozambique — Manica, Sofala, and Zambezia — when Cyclone Idai hit in March 2019. More than 127,500 people were displaced, 90,000 homes were destroyed, and approximately 1.85 million people were affected.<sup>1</sup> The cyclone also caused crop losses, resulting in a threat to food security and water safety. Among the three study areas, Sofala province was the most affected. Flooding and wind damage affected Manica and Zambezia provinces to a lesser extent.

## Details of the Intervention

Researchers in Mozambique are evaluating the impact of the FCC program on household preferences, health behaviors, shock affectedness, resilience, and individual economic preferences. The goal is to assess whether the FCC program has helped households cope with the effects of Cyclone Idai, how the disaster burden varied across the different study areas, and impacts on health decisions. Researchers are leveraging the fact that half of the eligible communities were randomly selected to receive the FCC program, and the other half were assigned to a comparison group that did not receive the intervention.

The study is being conducted in the 76 communities where the FCC program was being evaluated before the cyclone hit. The FCC program is designed to support, protect, and care for orphans and vulnerable children and their caregivers. The program seeks to improve coordination between community groups, schools, and health facilities; increase organizational capacity; provide limited financial support to community organizations and schools; and promote and coordinate village savings and loan groups. A key feature of FCC is home visits by program staff to assess household vulnerabilities and refer participants to different services according to their needs. As part of the visits, staff also refer individuals for HIV testing and antiretroviral therapy, as appropriate.

Participant households were surveyed between May 2017 and May 2018, before Cyclone Idai. For this study, researchers will follow up with 4,694 of them, including those who were internally displaced or who moved dwellings. Researchers will also provide estimates of the differentiated impact of the cyclone in the three study areas using satellite data and measures of flood-affectedness.

## Results and Policy Lessons

Project ongoing; results forthcoming.

## Sources

<sup>1</sup>ACAPS, “Tropical Cyclone Idai in Mozambique Update II.”

July 13, 2021