



2021 - 2024

COMMUNITY ENGAGEMENT FOR FLOOD RESILIENCE IN MOZAMBIQUE

FINAL REPORT ON THE FLOOD RESILIENCE PROGRAM





The Zurich Flood Resilience Alliance is a multi-sectoral partnership which brings together community programmes, new research, shared knowledge and evidence-based influencing to build community flood resilience in developed and developing countries. We help people measure their resilience to floods and identify appropriate solutions before disaster strikes. Our vision is that floods should have no negative impact on people’s ability to thrive. To achieve this, we are working to increase funding for flood resilience; strengthen global, national and subnational policies; and improve flood resilience practice.

Find out more: www.floodresilience.net



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ACKNOWLEDGEMENTS

We extend our heartfelt gratitude to all those who have been part of this journey.

To our dedicated team members, both past and present, your hard work, passion, and innovative spirit have been the backbone of our initiatives. Your tireless efforts, often under challenging conditions, have transformed lives and strengthened communities.

We are profoundly grateful to our community partners and local leaders. Your collaboration, trust, and local knowledge have been invaluable. We also extend our appreciation to the partner organisations that have worked alongside us. Your cooperation and shared vision have been crucial in advancing our goals and amplifying our reach.

To the residents of the communities we serve, thank you for your resilience, courage, and active participation. Your stories of hope and perseverance inspire us daily and drive us to continue our work with renewed vigor.

As we reflect on the past three years, we are filled with pride for what we have achieved together and optimism for the future. Let us continue to work hand in hand, building on our successes and forging new paths toward a resilient and sustainable Mozambique.



EXECUTIVE SUMMARY

We are most proud of the growing commitment from communities to actively participate in flood resilience actions, from the creation of local committees, community planning, and commitment to collaborate with door-to-door mobilizations. Our key activities, including the training and equipping of local DRM committees, DRR awareness raising, drainage cleaning and keeping Early Warning System functional are generating positive impact in the target and neighboring communities.

In this same spirit, the Mozambique Red Cross expresses a sense of mission accomplished with the successful implementation of the project's main activities, including the training and equipping of Local Disaster Risk Management Committees.

Maria Cristina Uamusse, General Secretary of the Mozambique Red Cross

Globally, flood exposure is a major concern, with floods often leading to substantial economic and social ramifications that are projected to increase in the future. Alongside tropical cyclones, floods represent a significant risk in Mozambique, affecting lowland, highland and urban areas throughout the country every year.¹

This report presents the culmination of efforts by the Mozambique Red Cross Society, together with the International Federation of Red Cross and Red Crescent Societies (IFRC), as a member of the Zurich Flood Resilience Alliance, in enhancing flood resilience within communities in one of Mozambique's most flood-prone regions.

PILLARS OF CHANGE

In this report, we explore **2 fundamental pillars of change** that have led to significant impact at the local level as a result of the program's work between 2021 and 2024:



Families and communities are more aware of risk and have the capacity to prepare and respond to floods.



Community early warning infrastructure is functioning, and environmental management is prioritised for greater flood resilience.

LESSONS LEARNED AND RECOMMENDATIONS

Leveraging the Flood Resilience Measurement for Communities (FRMC) framework, the program engaged deeply with local populations, integrating their insights into both local actions and national plans and dialogues.

This report outlines recommendations for future initiatives, emphasizing the importance of community-led interventions, stakeholder engagement, and leveraging organizational strengths to sustain and scale the resilience-building efforts:

- Ensure people are at the core of resilience-building actions.
- Build resilience in diverse ways with an eye on sustainability.
- Understand community resilience strengths and gaps.
- Explore mechanisms for program continuity and adaptability.





Figure 2: Scales of impact

LOCAL

Deep and lifelong changes in mindsets and practices related to flood resilience.



SUBNATIONAL

Replication and scaling up of best practice to broader populations and key sectors.



NATIONAL

Integration of community priorities in national plans, policies and budgets.



GLOBAL

Contribution of Alliance knowledge and experience to global initiatives.

Multi-sectoral partnerships bring together different points of view - governments, non-profit organisations, academia, private companies such as Zurich and most importantly, community perspectives - to work towards a common goal. This collaboration allows for the sharing of resources, experiences, and ideas, leading to more effective and coordinated efforts.

Francisco Ianni, Senior Officer – Floods Resilience, IFRC

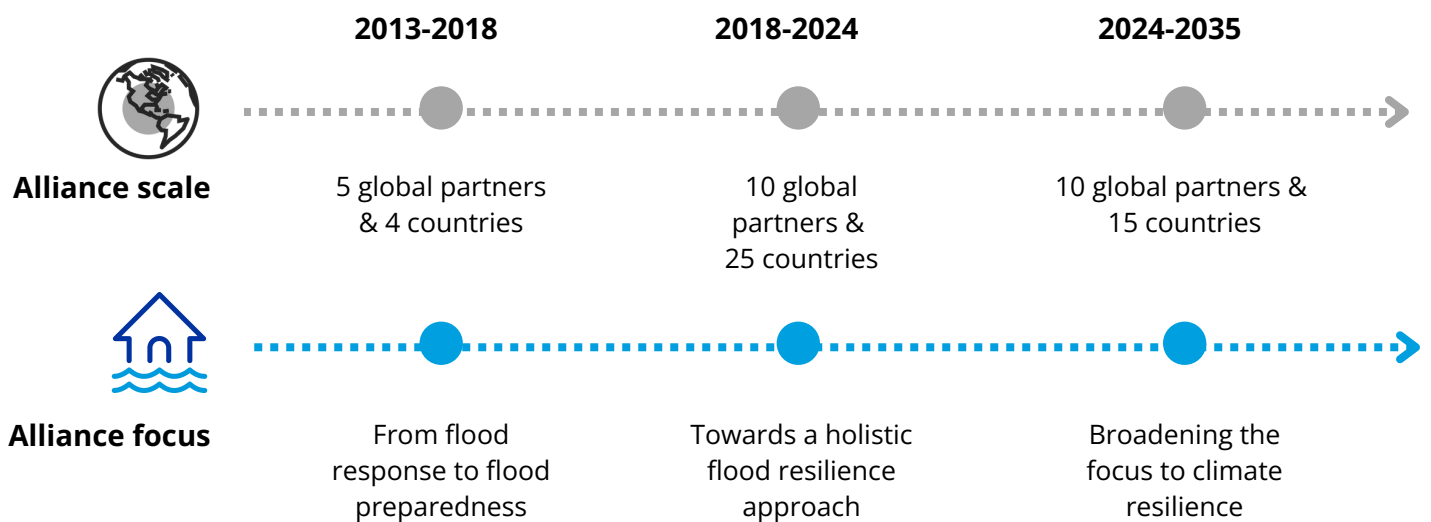
INSTITUTIONAL CONTEXT

As a founding partner of the Alliance, the **International Federation of Red Cross and Red Crescent Societies** (IFRC) has supported the strategic direction and empowerment of country programs and local communities to take the lead in understanding, preparing for and adapting to flood risks across the regions of Africa, Americas, Asia-Pacific and Europe.

The **Mozambique Red Cross Society** (Cruz Vermelha de Moçambique – CVM) was founded in 1981 and is currently active across all 11 provinces with a network of 111 Red Cross branches and more than 6,800 volunteers.

CVM is an integral element of the disaster management system in Mozambique and is recognised as an auxiliary role to the public authorities in the humanitarian area. CVM works to offer humanitarian assistance, health, and social services, among other activities, to meet the needs of vulnerable communities. Since 2019, the IFRC, ICRC, and Partner National Societies have been supporting CVM from its delegation in Maputo in enhancing emergency response capacities and strengthening longer term needs including livelihoods, disaster risk reduction, epidemic preparedness and response, and climate change adaptation.

Figure 3: Evolution of the Alliance and the Mozambique Red Cross



In 2019, Alliance partners collaborated on a Post Event Review Capability (PERC) study to examine the 2019 Cyclone Idai and Cyclone Kenneth impacts in Malawi, Mozambique, and Zimbabwe.



Mozambique Red Cross led the Flood Resilience Program in Mozambique (2021-2024).

COUNTRY CONTEXT

As part of the Alliance, CVM has been at the forefront of flood resilience work in peri-urban and rural communities in one of the most flood-affected areas of the country, the Sofala

Province. In the coastal part of the Sofala Province floods, cyclones, erosion, and sea-level rise are recurrent and serious risks.

Figure 4: Target communities

- Targeted three peri-urban communities: Ndunda, Mungassa and Maraza.
- Capital and largest city of the Sofala Province where the Buzi River and the Pungwe River converge to meet the Indian Ocean.
- Location of the Port of Beira, a key port for Mozambique and the neighbouring land-locked nations of Zimbabwe, Zambia and Malawi.
- Deforestation and land degradation has heightened flood risk.

Beira, Sofala

Buzi, Sofala

- Targeted three rural communities: Macurungo, Bairro 2000 and Inhabirira.
- Rural communities located along the Buzi River.
- The economy is primarily based on agriculture, and in particular sugar production.
- Flood and drought risk represent significant challenges to agriculture and livelihoods.

Other factors such as high poverty rates, recent economic crises, food insecurity, inadequate infrastructure and ongoing conflict all contribute to the vulnerability of the population.

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Criteria for community selection was based on vulnerability to recurrent disasters and past impacts suffered as a result of extreme weather events. These communities were severely affected by Tropical Cyclone Idai, which hit the region in the spring of 2019, and are still in the

process of recovering almost five years later. Given the high level of exposure to disasters and the ongoing need for reconstruction, these areas were prioritized to ensure that the project's actions contributed to strengthening resilience and mitigating future impacts.

FROM RESPONSE AND RECOVERY TO PREPAREDNESS AND RESILIENCE

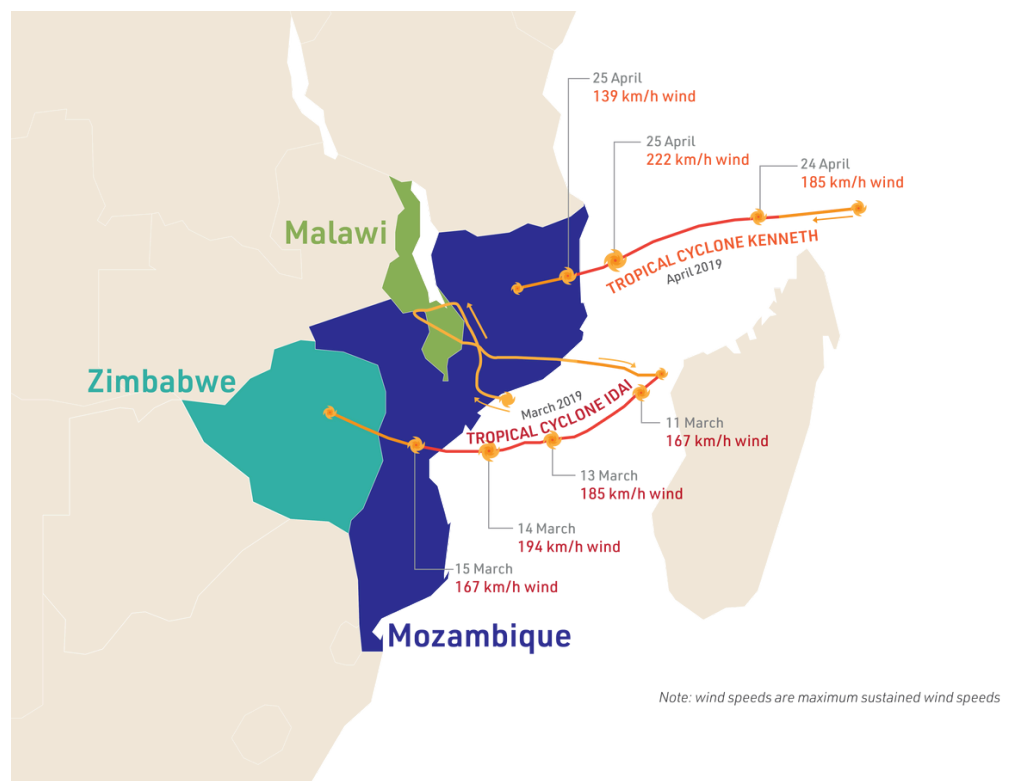
The Flood Resilience Program in Mozambique emerged out of the emergency response operations of Tropical Cyclones Idai and Kenneth in March and April of 2019 and the corresponding **Post-Event Capability Review (PERC)** study in 2020.

Tropical Cyclone Idai hit central Mozambique in the early morning hours of the 15th of March in the coastal city of Beira before moving northeast into Malawi and Zimbabwe. As a category 2 cyclone with strong winds, torrential rainfall and storm surges, Idai caused widespread flooding and landslides that led to over US\$2 billion in damages, destroyed over 200,000 homes, and left over 1,300 people dead, with many more missing. The precursor to Cyclone Idai, Tropical Depression 11, had already brought heavy rains and flooding to Mozambique in early March. This contributed to Cyclone Idai becoming the

deadliest storm ever to hit Africa and the largest humanitarian disaster of 2019.

For the first time in recorded history, another strong tropical cyclone (at or above Category 2) affected Mozambique during the same season, as **Tropical Cyclone Kenneth** made landfall with windspeeds of 220km/h in Mozambique just a month after Idai in April 2019. Kenneth caused flooding primarily in rural areas of the Sofala Province due to the overflow of rivers and dams that were already at capacity.

In Mozambique, Idai and Kenneth resulted in significant loss of lives and livelihoods, widespread damage and destruction of homes and buildings, the complete interruption to transportation, energy and communication networks, as well as internal displacement in the hundreds of thousands.



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The **Post Event Review Capability** (PERC) methodology is designed to provide an independent review of large flood events to understand what went well as well as opportunities for improvement. In 2020, a team of Alliance partners including the Institute for Social and Environmental Transition – International (ISET), IFRC, Practical Action and the Zurich Insurance Group, in collaboration with the Mozambique Red Cross Society and the Swiss

Agency for Development and Cooperation (SDC), undertook the first study of its kind in southern Africa to capture the lessons from the response and recovery to Cyclones Idai and Kenneth.

The PERC study titled **'When the unprecedented becomes precedented: Learning from Cyclones Idai and Kenneth'** was based on interviews with diverse stakeholders and a review of over a hundred secondary sources.

A number of **recommendations for strengthening flood resilience** are described in the PERC study, covering lessons learned and priorities related to preparedness, response and recovery activities. Below are three of the opportunity areas that are most relevant to the context of Mozambique:



Early Warning Early Action

- Contextualise early warning systems and ensure alerts include key recommendations and actions.
- Engage local communities in the system and raise awareness of evacuation routes and shelters.



Critical infrastructure

- Invest in participatory and accessible reconstruction processes during cyclone recovery.
- Identify critical infrastructure and prepare contingency plans for their potential failure based on different scenarios.



Localization of knowledge and skills

- Increase local capacities to respond to needs in the immediate aftermath of extreme events.
- Ensure communities have the capacities and equipment to provide an effective response to the local population.

Click on the images below to read the full report, executive summary and related briefs.



WHEN THE UNPRECEDENTED BECOMES PRECEDENTED: Learning from Cyclones Idai and Kenneth



EXECUTIVE SUMMARY Learning from 2019 Cyclone Idai and Cyclone Kenneth Malawi, Mozambique, and Zimbabwe



Learning from Cyclone Idai and Cyclone Kenneth to Inform Long-term Disaster Risk Reduction Programming in Mozambique



Introduction
The impact of Cyclones Idai and Kenneth highlighted the need for long-term investments in disaster risk reduction (DRR) programming. In March and April of 2019, the two cyclones made landfall in central and eastern Mozambique causing widespread destruction, damage, and loss of life from strong winds, rainfall, and ensuing flooding. Cyclone Idai, a category 2 cyclone when it made landfall, was the deadliest storm ever in the African continent. Cyclone Kenneth, a category 4 cyclone with wind gusts of 220 km/h, was the deadliest storm ever in Mozambique.



Learning from Cyclone Idai and Cyclone Kenneth to Strengthen Early Warning Systems in Mozambique



Introduction
The impacts of cyclones Idai and Kenneth highlighted the need for greater investment in Early Warning Systems (EWS) in Mozambique. In March and April of 2019, the two cyclones made landfall in central and eastern Mozambique causing widespread destruction, damage, and loss of life from strong winds, rainfall, and ensuing flooding. Cyclone Idai, a category 2 cyclone when it made landfall, was the deadliest storm ever in the African continent. Cyclone Kenneth, a category 4 cyclone with wind gusts of 220 km/h, was the deadliest storm ever in Mozambique.

OUR IMPACT

In the past five years, the program in Mozambique has generated significant impact on flood resilience in local communities and has **scaled up** through joint planning and collaboration with sub-national and national actors, and **scaled deep** to shift institutional approaches, culture, and beliefs from response-only to resilience.

+50,000 lives improved

New mindsets and behaviours, and improved infrastructure that has a sustained positive impact on people's lives.

+220,000 indirect reach

Population that benefits from large scale awareness raising campaigns and the flow-on effects of community interventions.



Activities carried out in peri-urban and rural communities and with local and national actors.



Diverse resilience actions implemented, including public awareness campaigns, local volunteer training and engagement programs, community cleanups and infrastructure repair and stakeholder meetings to ensure the program remained locally driven.

A story from the community

Alberto José lives in a rural community in the district of Buzi, alongside the coast of central Mozambique. He has participated in the canal cleaning activities facilitated by the project and reflects upon the importance of this action for greater flood resilience:

"Well, it's very important because we've been suffering from disasters for a long time and, for example, ... [we have] issues with the drainage canals, which are clogged, for example some ditches have people living there, and the other ditches are also clogged."

"We're cleaning the ditches. This is very important for the community ... So, for example, you can walk around now, there are



many ditches that have been cleaned. From here, for example, about 300 metres away you can see that there are clean ditches."

In a neighbouring community, Gracinda commented on the same activity: *"And now we're doing some major cleaning. That's so that when the neighbourhood is flooded, the water will flow more through the canals we're making."*



FROM MEASURING TO BUILDING RESILIENCE

The **Flood Resilience Measurement for Communities** (FRMC) is a framework and tool developed by the Alliance. As a decision support approach for both community programming and policy change, the FRMC supports a deeper and systems-level understanding of resilience gaps and strengths designed around the five capitals: natural, financial, human, social and physical.

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FRMC studies carried out in 6 communities in peri-urban and rural contexts.



Translation of FRMC tool and guidance to Portuguese.

Baseline FRMC studies strengthen understanding of the risk context at local and subnational levels, support connections with stakeholders, identify priorities and potential entry points, and define locally led interventions.

- Key resilience gaps identified across all communities included lack of knowledge of flooding coping mechanisms to protect lives, health, assets and businesses.
- The baseline studies also highlighted the interruption to education during floods where schools are frequently used as shelters, the lack of health services and first aid capacity within the communities as well as poor waste management and limited access to drinking water.

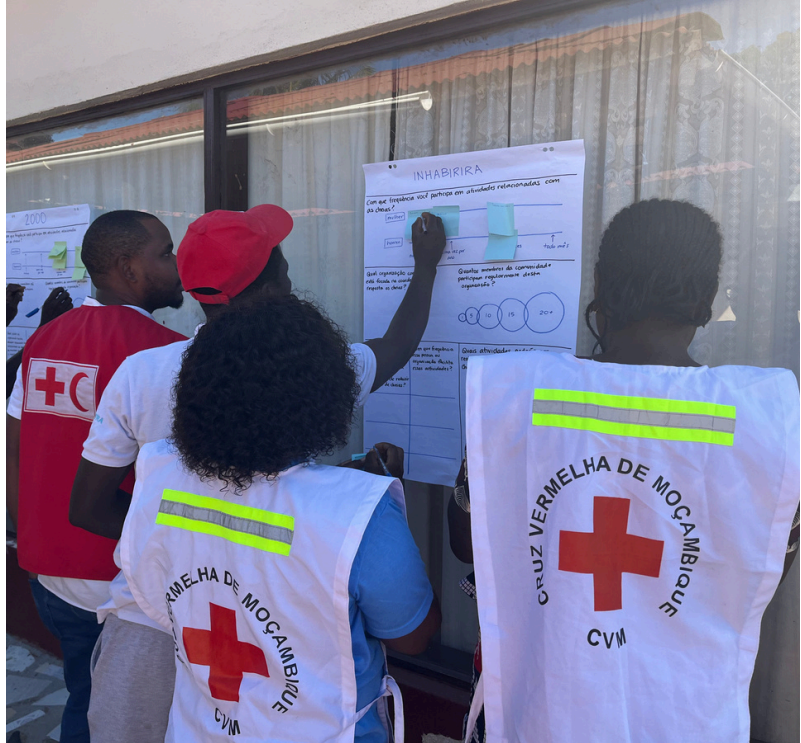
Endline FRMC studies are key to learning how resilience changes in response to diverse interventions and to providing up-to-date information to stakeholders to support ongoing resilience-building.

- Flood resilience was strengthened, particularly in relation to human capacities, knowledge, social engagement, networks, and cohesion.
- Community participation in activities related to floods increased in all communities, leading to more inclusive collection action to reduce the impact of floods.

In Mozambique, FRMC studies were implemented in a sprint format where study design, data collection, grading and analysis were completed in quick succession over a short period of time. Furthermore, data collection was concentrated on focus groups and review of secondary sources. Agility was prioritised due to a number of factors:

- The Post-Event Capability Review (PERC) study undertaken in 2020 in response to the impact of Tropical Cyclones Idai and Kenneth provided a strong foundation of knowledge regarding the strengths and gaps in flood resilience in Mozambique.
- The project timeline, with a 3-year duration, aimed to balance resources appropriately between resilience measurement and resilience building actions.
- Local leaders advised that conducting a sample of household interviews in the community presented a safety and reputational risk which might be misinterpreted as the Red Cross providing select aid to just a few families.

The application of the FRMC was challenging due to the limited time and resources available for training personnel and undertaking data collection. Additionally, technical issues with the FRMC application and the timing of activities during the rainy season further complicated the process. Nevertheless, the FRMC process also provided the opportunity for training of Red Cross volunteers from the target communities in the facilitation of focus groups discussions and data collection. During the application of the endline studies, local volunteers were key to collecting data, as well providing their own perspective.





IMPACT Families and communities are more aware of risk and have the capacity to prepare and respond to floods.

Community and household preparedness was strengthened by a number of interventions that aimed to increase awareness of risk and enhance local capacities. Risk awareness was increased through **Door-to-Door visits** and dissemination of **key messages through radio spots** via regional radio stations and local loudspeakers. These key messages to prevent and prepare for floods were developed in coordination with local authorities and National Institute of Disaster Management (INGD).

Audios were disseminated in Portuguese as well as local languages including Cindau and Cisená to ensure widespread accessibility to the information especially in rural areas where majority of the population do not speak Portuguese. Risk awareness activities were prioritized during the rainy season when this information was most valuable and urgent to the local population. It is estimated that these radio spots reached more than 220,000 people.

"... Don't drink flood water and don't play in flood waters. Prioritize the removal of livestock and pets before flooding. Identify emergency exits before floods. Conserve drinking water and other important items, food, documents and medicines... set up sandbags to prevent water from entering your home. Identify the risks associated with flooding near rivers and lakes."

Excerpt from radio spots awareness raising



Additionally, local organisation and collective capacity was supported through the formation of **6 School-based Risk and Disaster Management Committees**, with the direct participation of 108 members. Training of students and teachers was facilitated through a collaboration with the Ministry of Education and INGD which was key to empowering the local community to take an active role in risk management, both by taking measures to reduce risk and be prepared as well as to have the capacity to provide a basic first response in the case of flood before external services can arrive.



Awareness of risk exposure and knowledge on evacuation (when and where to evacuate) was maintained or increased over time in all six target communities.



ACTIVITY SPOTLIGHTS

LISTEN
TO THE
RADIO
SPOTS



▶ Door-to-door awareness raising

Thousands of **door-to-door visits** were carried out in Beira and Buzi to share key messages and raise awareness of flood risk at the household level. This approach allowed Red Cross staff and volunteers to **engage directly with families** to have deep, one-on-one conversations, to make recommendations based on the specific context of each family and to answer questions from the families themselves.

These visits focused on topics such as identifying evacuation routes, preventing water from entering the house, receiving credible information before floods, what to do in the case of flooding, where to get support, and how to protect important documents and valuables. This intervention was effective in providing families with the **knowledge and tools** to adequately prepare for floods and reduce the impact on their lives, health, assets and livelihoods.

▶ Local Disaster Risk Management Committees

Local Disaster Risk Management Committees (Comités Locais de Gestão de Riscos e Desastres – CLGRD) are recognized as the local extension of the national Civil Protection network and play a critical role in community flood resilience. CVM worked with the local governments and the INGD to revitalize these local groups, resulting in the **formation and training of six committees**, with the direct participation of 108 members. Trained in first aid, risk assessment, and flood response, these committees are provided with readiness kits, including materials to apply First Aid and share Early Warning messages. In 2024, **flood drills** were carried out to bring together the municipality, local authorities, INGD, the National Institute for Meteorology,

Civil Protection, CVM staff and volunteers and communities in practicing key preparedness and response actions such as activating the Early Warning System, taking early action including evacuation and setting up an operations centre to coordinate response actions. More than 260 people participated directly in these simulations.

These CLGRD have been essential to **regular local disaster planning** to identify and map hazards and to develop community action plans for increasing flood resilience. During the lifetime of the program, these committees have been active in preparing for and responding to flood events, including in relation to Tropical Cyclone Freddy and Tropical Storm Filipo in 2023, taking action such as disseminating early warning messages and evacuating the population from high-risk areas.



LEARN
MORE

Using the FRMC approach with communities in Sofala we realized that there are places where there is little or no access to emergency services (health posts) where people are forced to travel miles in search of these services.

Liliane Manguela, Mozambique Red Cross



2000+

households directly engaged with door-to-door visits where key messages and recommendations regarding flood risk were shared.

PILLAR 2



IMPACT

Community early warning infrastructure is functioning, and environmental management is prioritised for greater flood resilience.

In addition to strengthening human and social capital, CVM took action in Beira and Buzi to enhance both the physical capital, through the installation of **flood warning infrastructure**, and the natural capital, through the **rehabilitation of drainage and waste management systems**.

The PERC study reported that in the days and hours before the initial impact of Tropical Cyclones Idai and Kenneth many households received early warnings but did not know what action to take at the family or individual level. Further, much of the region was isolated in the aftermath of these storms and did not receive immediate external support.

The program also sought to leverage the natural capital for enhanced flood resilience. CVM coordinated with the Municipality of Beira and the Government of the District of Buzi in the **restoration of mangroves**, recognizing the importance of Nature-Based Solutions (NBS) to increase flood resilience. CVM acquired 1000 tree seedlings which were distributed equally to the Beira and Buzi districts to contribute to the recovery and environmental preservation effort. Additionally, waste management activities in communities and schools were strengthened via the installation of 18 **Ecopoints**, which each consist of 3 garbage collection containers to separate paper, plastic and other organic waste.



ACTIVITY SPOTLIGHTS

▶ Repairing and installing of Early Warning devices

The repair of Community-based Early Warning Systems (EWS) represented a significant step towards ensuring the local population could **receive flood alerts and take early action** to reduce the impacts of floods. In the Beira and Buzi areas, local Early Warning Systems were previously installed to monitor the river levels and trigger audio alerts throughout the community. Audio alerts indicate the severity along a traffic light scale of orange, yellow or red alert.

CVM supported the maintenance and installation of six EWS in Buzi and Beira that had been damaged or destroyed as a result of Cyclone Idai and disasters that affected the areas during the course of this project. In addition to leading the rehabilitation of this aspect of the EWS, local authorities were trained to undertake the necessary maintenance of this equipment, thereby increasing the sustainability of this intervention. This activity directly benefits more than 7,000 people.

▶ Rehabilitation of local drainage systems

Canals are key to draining rainwater from urban areas of Beira City and directing this excess water to the ocean. Similarly, canals in the rural communities of Buzi are key to protecting households, crops and roads. Over 20 years since their construction, these canals have been damaged by recurring floods and neglected through a lack of maintenance and the original concrete structures have washed away or deteriorated. Furthermore, the absence of an effective waste management and collection system in these communities has meant the canals are often used as a deposit for waste.

CVM convened a group of community volunteers, as well as the members of the Local Disaster Risk Management Committees (CLGRD), to undertake a **canal cleaning activity** to clear the drainage system of waste and vegetation annually for 3 years using rakes, machetes, scoops, garbage cans and drums. This intervention resulted in improvements to the flow of water through the canals, increasing the drainage capacity and reducing the blockages that in the past have led to repeated floods and stagnated flood water.



INSTITUTIONAL LEARNING

The Flood Resilience Program has led to a process of institutional learning within the Mozambique Red Cross (CVM) that includes increasing capacities and opportunities related to climate resilience work. The Lessons Learned workshop, held with internal and external stakeholders in mid-2024, ensured that experiences and reflections from multiple perspectives were shared and captured for the improvement of future programming.

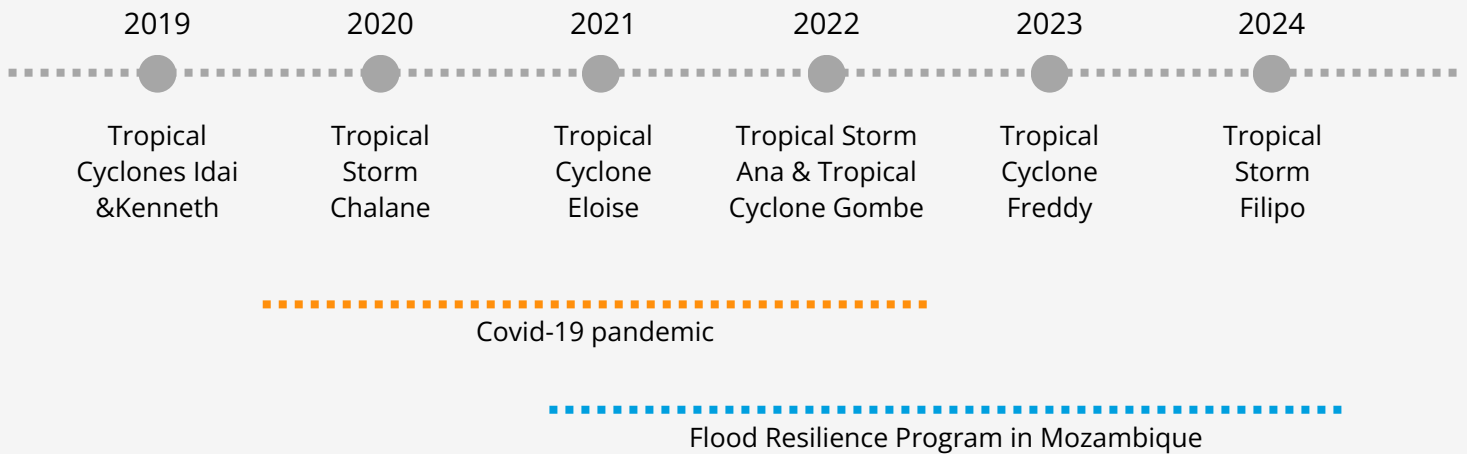
CVM is an active partner in the national disaster management system, has a recognised auxiliary role and works closely with its government in both humanitarian and development programmes. The Flood Resilience Program has contributed to strengthening the working relationship between CVM and governmental agencies such as National Institute of Disaster Management (INGD) and the National Meteorological Institute (INAM) at the provincial level in Sofala, as well as with other actors such as the Foundation for Community Development (FDC).

The Flood Resilience Program in Mozambique represents the **first introduction of community flood resilience work** in the Sofala province led by CVM. This was an important shift from the delivery of immediate humanitarian assistance to the provision of longer-term recovery and resilience support for communities at high risk of flooding. While the team applied traditional institutional methodologies such as the participatory

approach, the Program also saw the introduction of **new ways of working**, such as the Flood Resilience Measurement for Communities (FRMC), and the **piloting of diverse interventions** including capacity building, awareness raising campaigns, environmental management, and infrastructure repair actions. Furthermore, the **capacity of CVM staff and volunteers was strengthened** through trainings in resilience measurement, disaster risk reduction, climate change actions, first aid and the conduct of awareness raising campaigns.

During the program and through participation in **working groups and coordination meetings** with key stakeholders, the CVM supported activities such as climate risk assessment and social analysis in disaster-prone areas, joint planning for the cyclone season and the preparation of cross-institutional simulations. In addition to providing technical support, the CVM leveraged its engagement with communities to communicate the local needs, priorities and capacities and to ensure the integration of community voices into national and subnational plans, policies and dialogues. While these represent regular activities carried out by CVM, the experience of the Flood Resilience Program increased the understanding of community needs and capacities that were included in these discussions, and at a district level provided opportunities for Red Cross to strengthen their relationship and coordinate with local authorities.

Figure 5: Key disasters throughout the lifetime of the program



The recurring impact of disasters in the past few years was the most challenging aspects of implementing the Flood Resilience program.

In the past five years, cascading and compounding disaster risks have led to layered impacts, where each new disaster compounds the effects of previous ones, straining already vulnerable infrastructure, health systems, and livelihoods. Flooding and cyclones exacerbate poverty, food insecurity, and displacement, particularly as communities struggle to rebuild while facing recurring crises. Additionally, these climate-driven disasters often trigger secondary risks, such as disease outbreaks (e.g., cholera and malaria) due to damaged water and sanitation facilities, creating a complex, cascading cycle of vulnerability.

Given the mandate of CVM to undertake disaster response actions during emergencies, and in anticipation of the recurring and compounding risk, the Flood Resilience Program planned ahead for a crisis modifier that would allow for the rerouting of funds to address local needs in the target communities.

For example, in the lead up to Tropical Storm Filipo in 2024 the Flood Resilience Program supported the dissemination of early warning messages through CVM volunteers. Following the Storm Filipo, the project also supported CVM to conduct needs assessment in the communities to ensure the relevant and immediate assistance is delivered. However, as the impact was not as extensive as anticipated, no further funds was reallocated to Storm Filipo Response. This crisis modifier takes into account the dynamic needs of the community, ensuring that disaster preparedness, response, and recovery form part of a resilience-building pathway. It is important to highlight that responding to emergencies and disasters demanded time and human resources from both the IFRC and CVM teams to ensure the timely provision of life-saving assistance to affected people, hence contributing to the delays in the implementation of the program.

Other **external factors** that impacted the implementation of the Program included the Covid-19 pandemic, political instability, and insecurity. **Travel restrictions** due to the Covid-19 pandemic prevented the formation of the IFRC team and complicated in-person trainings and collaborations and the **safety concerns** for CVM teams and volunteers led to delays in activities in the field. Engagement with stakeholders at the national, subnational, and local level was varied throughout the lifetime of the Flood Resilience Program due to

limited availability of key actors, conflicting plans and priorities of different agencies and extensive bureaucratic processes.

Finally, **staff turnover, administrative challenges, and financial inflation** at the IFRC and CVM led to program delays. It was necessary to introduce new procurement and monitoring mechanisms to ensure the financial implementation of the program as well as continuously brief and provide trainings to new staff members.



RECOMMENDATIONS

The successful development of the Flood Resilience Program in Mozambique over the last 4 years has marked a pivotal improvement in community resilience. However, as climate risks continue to grow it is important that our approaches remain dynamic and innovative; leveraging the lessons learned from previous experiences.



Ensure people are at the core of resilience-building actions.

- Directly engage families in door-to-door activities.
- Prioritize the translation of key messages to local languages.
- Engage key community actors, such as teachers, to inspire wider participation.
- Consider the availability and readiness of community members that are still recovering from disaster.



Build resilience in diverse ways with an eye on sustainability.

- Leverage systems change approach by seeking change at multiple levels.
- Implement diverse interventions that target resilience from different angles.
- Link Local Disaster Risk Management Committees to local authorities for ongoing training and collaboration.
- Ensure equipment and infrastructure is accompanied by maintenance training with local authorities.



Understand community resilience strengths and gaps.

- Undertake participatory resilience measurement to clearly identify strengths and gaps.
- Leverage knowledge generated through analyses of past climate events.
- Balance resilience measurement processes with resilience building interventions within the program timeline.



Explore mechanisms for program continuity and adaptability.

- Integrate a crisis modifier into program planning to provide flexibility in the case of disaster during the program lifetime.
- Take steady and incremental steps to build a working culture of risk management, anticipatory action, and adaptive management responsive to changing operational circumstances.
- Monitor program progress and risks regularly.

REFERENCE LIST

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KEY RESOURCES



Review the following key resources to learn more about the experiences and lessons learned from the Flood Resilience Program in Mozambique.

About the Flood Resilience Program in Mozambique

- Alliance website: Where we work - Mozambique ([English](#))

Measuring resilience

- Key messages from the FRMC endline results in Beira and Buzi ([Portuguese](#)).

Pillar of Change 1: *Families and communities are more aware of risk and have the capacity to prepare and respond to floods.*

- Blog: First Aid for flood resilience ([English](#)).
- Radio spots: key messages for flood preparedness ([Portuguese](#)).

Pillar of Change 2: *Community early warning infrastructure is functioning, and environmental management is prioritised for greater flood resilience.*

- Blog: canal cleaning (English - link pending).

Post-Event Capability Review: Response and recovery to preparedness and resilience

- Full report: When the unprecedented becomes preceded: Learning from Cyclones Idai and Kenneth ([English](#), [Portuguese](#)).
- Executive summary: Learning from 2019 Cyclone Idai and Cyclone Kenneth: Malawi, Mozambique and Zimbabwe ([English](#)).
- Brief: Learning from Cyclone Idai and Cyclone Kenneth to Inform Long-term Disaster Risk Reduction Programming in Mozambique ([English](#)).
- Brief: Learning from Cyclone Idai and Cyclone Kenneth to Strengthen Early Warning Systems in Mozambique ([English](#)).
- Brief: Bridging the divide: Lessons from disaster risk reduction, development and humanitarian approaches to Cyclones Idai and Kenneth ([English](#)).
- Zurich Flood Resilience Alliance Webinar: The power of post event reviews ([English](#)).
- [Video](#): Mozambique: Red Cross drone footage shows extent of devastation.
- Blog: Remembering the forgotten disaster: one year after Cyclones Idai and Kenneth ([English](#)).



