



Flood
Resilience
Alliance

PHASE II IMPACT BRIEF ZURICH FLOOD RESILIENCE ALLIANCE

CONCERN
worldwide

Programme Overview:

Flooding poses a major global threat, with recent research revealing that over 20% of the world's population lives in areas at risk of a 1-in-100-year flood. This danger is most acute for low-income households, and cause some of the largest economic, social and humanitarian losses.

The Zurich Flood Resilience Alliance (ZFRA) is a multi-sectorial partnership focusing on finding practical ways to help communities around the world, strengthen their resilience to flood risk.

Concern Worldwide is working in collaboration with the ZFRA to improve the lives of communities affected by flooding in Bangladesh, Kenya, Malawi and South Sudan. The programme takes an innovative approach, allowing local community groups to find practical ways to strengthen their resilience to flood risk with technology and insights to monitor, predict and plan for the devastating effects and impacts of flooding before it occurs.



A man uses a small bridge to cross a river in Mikemani village, Tana River County. Photo: Zurich Flood Resilience Alliance/Concern Worldwide

Project dates:

2018–2024 (phase II)

Locations:

Bangladesh, Kenya, Malawi and South Sudan.

Participants:

73 flood-vulnerable communities
(213,063 direct & 731,253 indirect)

Donors:

Z Zurich Foundation and Zurich Insurance Group

ZFRA Partners:

International Federation of Red Cross and Red Crescent Societies (IFRC), the International Institute for Applied Systems Analysis (IIASA), the Institute for Social and Environmental Transition (ISET-International), London School of Economics (LSE), Mercy Corps, Plan International and Practical Action.

ZFRA objectives:

1. To increase funding for flood resilience
2. To improve policy at global, national, and sub-national scales
3. To improve flood resilience practice at community level

South Sudan

- Diversified crop production
- Vegetable production
- Community disaster funds
- Village Savings and Loans
- CSA training and adoption
- DRR – first aid training

Kenya

- WASH
- Micro irrigation
- Income diversification e.g. apiculture
- CSA training and adoption
- Community led advocacy

Bangladesh

- Increasing financing at local level for DRR and flood resilience
- Raising residences, schools, latrines, animal shelters
- EWS/Anticipatory action
- Natural resource management incl tree planting
- Livelihoods - VSLAs
- Provision of agriculture inputs

Malawi

- CSA training and adoption
- EWS/Anticipatory action
- Tree planting
- Build back better – housing construction regulation
- Community disaster funds
- Irrigation farming

945,047

People across the 4 countries had their lives transformed through a variety of interventions.

Programme Impact for Phase II

The world’s poorest are most vulnerable to the effects of climate change. As natural disasters increase in frequency and severity, people must adapt to survive. During Phase II of Concern’s Flood Resilience Programme, combining disaster risk reduction and sustainable community-led solutions, 945,047 people across the 4 countries had their lives transformed through a variety of interventions.

When measuring the impact of our Flood Resilience Programme, we look at:

- Substantive Impact** = Improved Lives
- Enduring Impact** = Transformed Lives



Thomas Thiep Mayeun, Concern Livelihoods Project Manager standing by Lol river in Northern Bahr el Ghazal State. Photo: Jon Hozier-Byrne/Concern Worldwide

Country	Funding & Advocacy		Community Programmes	
	Substantive	Enduring	Substantive	Enduring
South Sudan	0	0	5,742	9,331
Malawi	68,865	13,773	8,621	4,210
Kenya	23,348	315,943	20,312	19,846
Bangladesh	29,695	4,949	57,234	44,107
Total¹	121,908	334,665	91,909	277,494

The figures in this table include some double counting between substantive and enduring and/or community practices and advocacy/funding.

1 Note potential double counting between funding/advocacy and community programmes.
 2 This number does not correspond with the number of people reached directly/indirectly as impact measurement is based on a separate set of criteria and a variety of tools and methodologies.

What is FRMC?

Developed by the Alliance in 2013 and currently used in 58 communities, the FRMC (**Flood Resilience Measurement for Communities**) tool is a key approach used throughout the programme cycle. The tool collects data at community level using an online web-based platform to help identify the risks and vulnerabilities communities face in times of flooding and then supports decision making around what is needed to address these gaps. The communities themselves identify these solutions based on the data.

What is CRAG?

CRAGs (Community Resilience Action Groups) were formed during the FRMC process and consist of nominated members (40% are women) who represent their communities. CRAGs ensure that communities receive support during and after flooding has occurred, communicating with local government institutions and departments at sub-district level.

What is PERC?

PERC (Post Event Review Capability) is a flexible method that analyses the root causes of why events become disasters – after all, disasters are not “natural” and there is a link to how a natural event turns into a humanitarian disaster. This is the link that PERC is trying to understand. This does not use FRMC methodology but is broader than that. It answers questions at event level - what has worked well and where opportunities are for further improvements. It has a forensic methodology that is open source. Over 24 PERCs have been completed around the world.

Building community resilience in Bangladesh

ZFRA has been working in Bangladesh since 2013, working directly with 80,000 people across 30 flood prone communities. Concern has helped establish CRAGs, mobilize Self-Help Groups, and establish Nature Based Solutions and Natural Capital Based Flood Management practices to prevent soil erosion, embankment failure, ecological restoration and controlling floods. For example, approximately 40,000 trees of different varieties were planted across the 21 communities between September 2021-September 2023.

“We prepare for the floods immediately after getting the early warning...We have the dry food ready. We raise our beds, and keep all our things raised, including the livestock. If the flood is severe, we go to the community flood centre. I learned a lot from this project.”

Malika Begum, Self-Help Group member.



Malika Begum is a programme participant of the Zurich programme. She benefitted hugely from the CSA aspect and learned to grow vegetables, even when there is flooding. She grows them on raised platforms. Photo: Gavin Douglas/ Concern Worldwide



Community dry season vegetable garden, Northern Bahr el Ghazal, May 2023. Photo: Rocky Roselle Emma

Actions informed by system and evidence-based resilience measurement in South Sudan

Although annual flooding is one of the major causes of recurrent disaster events in different parts of South Sudan, system, and evidence-based resilience measurements are extremely limited. By applying FRMC in 13 communities, Concern has been working to address this gap, using lessons learnt to enhance self-reliance and resilience strategies.

These have included, raising homestead compounds and floors of grass-thatched houses, digging water channels, constructing household dykes around farmland, and engaging in dry season vegetable production to address food shortages caused by crop failures resulting from floods. Village Savings and Loan Associations (VSLAs) have also been established, raising awareness, and contributing to the establishment of community disaster funds.

“The 34 VSLA groups established across 12 bomas are making a great impact in terms of access to finances as the groups continue to save. Apart from generating income, women are no longer buying vegetables in other markets as they can produce vegetables at this time of the season for first time in this community. I have observed a change in children’s health because of (the) new diversified diet. As a result of the various benefits, my community members began to appreciate this project, including those who claimed it is a waste of time in the past as it was not offering any tangible solutions to their immediate problems.”

Diing Akook - Community Chief

Implementing locally sources solutions to improve flood resilience in Kenya

In Kenya, Concern has been working in the coastal areas of Tana River with 13 communities of rural farmers; agriculture accounts for 67% of nationwide employment, with flooding taking a severely destructive effect on people’s lives and livelihoods. Between 2021 and 2023, the ZFRA programme supported three of these communities in setting up minor irrigation schemes, opening 150 acres of land further away from the riverine thus reducing perennial crop losses due to flooding.

To improve water, hygiene and sanitation during floods Concern has also carried out Community-Led Total Sanitation (CLTS) in 5 communities which included sensitization, behavioural change and the construction of toilets, handwashing stations and disposal pits.

“The community (Handaraku) designed toilets to withstand annual flooding; the toilets are dug deep, with strong foundations made from re-purposed oil drums, and are built on land above the flood line. As a result of engaging with Concern-trained community health volunteers, the residents have gained a greater understanding of the link between open defecation and disease especially when flooding occurs”.

Concern Worldwide Kenya Team.



Fatuma Adhan’s (L) shows community health volunteer, Hussein Mohamed (R), a toilet she recently constructed at her home in Hanaraku village in Tana River County. Photo: Zurich Flood Resilience Alliance/ Concern Worldwide



Malawi Concern staff in Madani Village, TA Marka, supporting food distribution by the Flood Security Cluster to households displaced by Cyclone Freddy in Nsanje. Photo: Concern Worldwide

Community led actions save lives in Malawi

In March 2023, Malawi experienced its worst flood in 50 years following Cyclone Freddy, destroying 179,000 hectares of crop fields and over 1,000 people reported dead or missing. Prior to the disaster, communities undertook several key interventions such as capacity strengthening of local structures, and how to effectively prepare for and anticipate flood risks including the development of early warning systems and evacuation plans which showed their value during the cyclone response with whole communities moving from high-risk areas to upland areas and no lives being lost due to flooding in all 15 Concern communities.

“Our role was to alert and warn fellow villagers. We used drums, shouting, whistles, and megaphones provided by the Zurich Flood Resilience Alliance to warn community members of the coming danger. We did this for three days prior to the cyclone.”

Onion James Thom, Vice Chairperson for Tizole Village Civil Protection Committee (VCPC).

Concern’s programmes in each country vary depending on the context but they all share common elements. During 2023, Concern has been sharing its learning and knowledge from the ZFRA programme look on our website:

