

Using Disaster Risk Financing to Build Adaptive Social Protection for Climate Shocks in Malawi

Social Support for Resilient Livelihoods | 2023



Copyright © Andrea Borgarello / World Bank



74,000 poor and vulnerable households eligible in 2021-2022



100,000 poor and vulnerable households eligible in 2022-2023



The project aim is to make a nationwide mechanism

The Government of Malawi (GoM) has put in place a mechanism that enables its flagship unconditional cash transfer program—the Social Cash Transfer Program (SCTP)—to scale up response to additional beneficiaries when shocks occur. Making the SCTP shock-responsive is a key strategic pillar of the government’s Disaster Risk Financing Strategy. The SCTP scalable mechanism was first implemented during the 2021/22 rainfall season in three initially selected districts (Blantyre, Ntcheu, and Thyolo). It covered 74,000 poor and vulnerable households that would be eligible to receive a cash transfer in the event of a shock, and in fact a drought and compounding shocks resulted in a payout for the households. In 2022/23, the mechanism was expanded to cover over 100,000 households in six districts; the long-term goal is to make it a nationwide mechanism.

This note summarizes the GoM’s process for establishing this mechanism and presents key results and lessons learned.

Disaster Risk Financing

Combining disaster risk financing (DRF) and adaptive social protection can help governments build the resilience of the poorest and most vulnerable households.

Adaptive social protection assists the chronic poor during ordinary times through core social protection programs and expands assistance in response to a crisis or shock by providing additional cash for existing beneficiaries (vertical expansion) and/or by adding additional beneficiaries to the program (horizontal expansion). DRF is the process of developing and implementing a sustainable strategy to cover the costs of responding to future disasters. By combining DRF with adaptive social protection systems, governments can safeguard livelihoods, potentially helping to break the cycle of poverty and vulnerability that disasters often perpetuate.



Scalable Mechanisms

Support to develop the SCTP scalable mechanism in Malawi was provided by the World Bank through the Social Support for Resilient Livelihoods project (SSRLP).

This mechanism is well aligned with the main objectives of the SSRLP to improve resilience among the poor and vulnerable population and to strengthen the national platform for safety nets in Malawi. The Finance, Competitiveness & Innovation Global Practice’s Crisis and Disaster Risk Finance team, with funding from the Global Shield Financing Facility (formally the Global Risk Financing Facility, funded by the UK and Germany), provided the technical expertise that supported the GoM in the design, implementation, and financing of the mechanism.



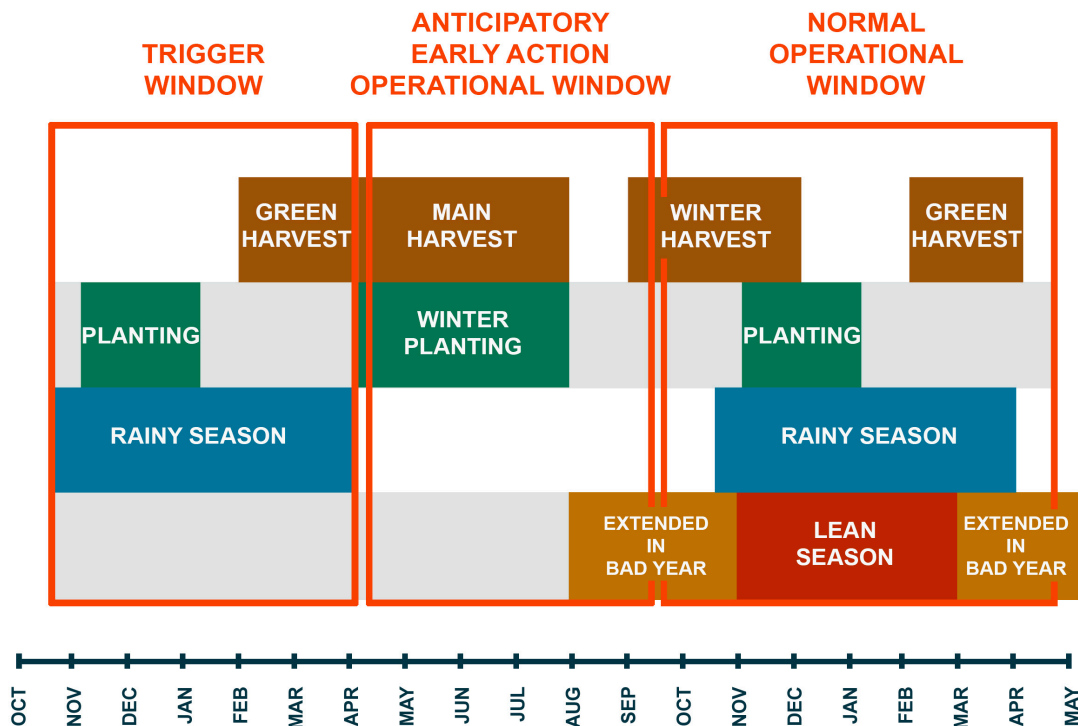
Beneficiary receiving payout in Ntcheu District

Source: National Local Government Finance Committee

Designing the Scalable Mechanism

The scalable mechanism monitors rainfall and food insecurity conditions during the agricultural season (November to April) and aims to deliver payouts to household beneficiaries before the start of the lean season (June to August) (figure 1). This timing increases value for money, as food prices are at their lowest before the lean season, and it reduces the use of negative coping mechanisms among poor households affected by drought.

Figure 1. Annual SCTP Scale-up Timeline

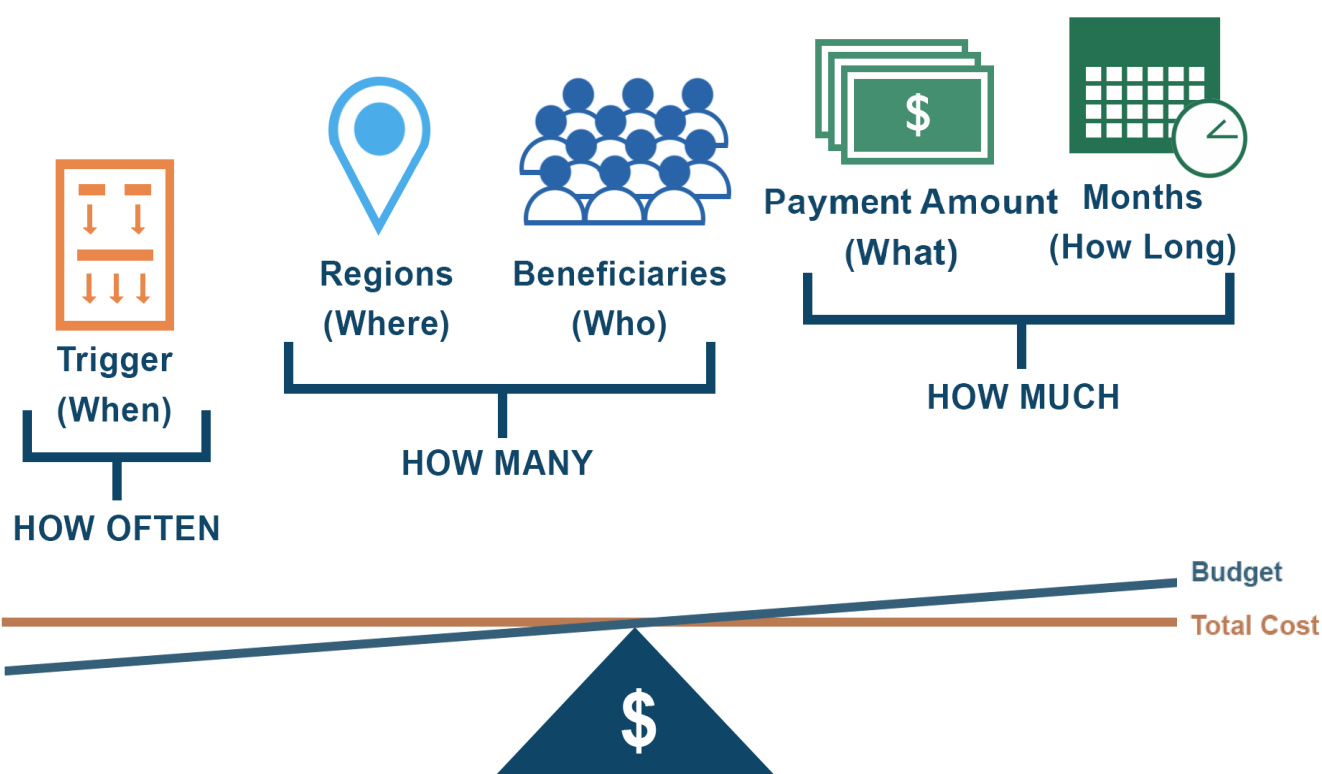


Source: Government of Malawi, "Social Support for Resilient Livelihoods: Scalable Handbook," 2021, <http://www.nlgfc.gov.mw/index.php/the-star/documents/file/135-scalable-handbook-updated-january2023>.



This scalable mechanism promotes early action by using pre-agreed and transparent rules and by pre-positioning financing instruments linked to those rules. To design the mechanism, the government had to make key decisions on parameters, including how often and for what type of events the mechanism should trigger, how many people it should cover, and how much assistance it should provide. These parameter choices ultimately determine the cost of scaling up the SCTP and entail trade-offs (figure 2). The chosen parameters are shown in table 1. Once parameters were selected, the GoM established rules for implementing this innovative SCTP scalable mechanism and included them in a publicly available Scalable Handbook. The handbook will be updated each year as lessons are incorporated.

Figure 2. Trade-offs Entailed in Selecting Key Mechanism Parameters



Source: World Bank.

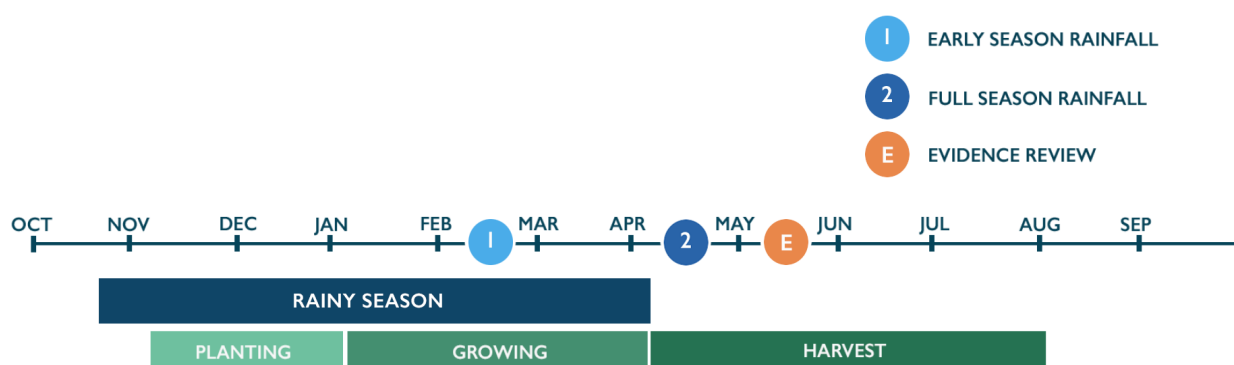
Table 1. Selected Design Parameters

Parameter	Level selected
Rural household coverage	17% in each of the 3 selected districts
Transfer amount per household per month	MK 25,000 (US\$ 24.4)
Duration of transfers	3 months
Historical frequency of scale-up	1-in-3-year return period

Source: Government of Malawi.

The scalable mechanism follows a dual trigger approach: a primary trigger blends two rainfall remote sensing indexes, and a secondary trigger is based on an evidence review (see figure 3 and box 1). The trigger levels for the primary trigger vary from district to district to ensure that the mechanism responds to droughts that happen on average once every three years. The secondary trigger, the evidence review, is used if the primary triggers are not met but there is concern that drought conditions prevail. This dual trigger approach that combines remote sensing and additional evidence is designed to mitigate the risk that the conditions on the ground differ from those presented by the remote sensing data. More details of the development of the trigger mechanism can be found in the technical note 'Technical Analysis to Inform the Trigger Design for Adaptive Safety Nets to respond to Climate shocks in Malawi'.

Figure 3. Trigger Structure



Source: Government of Malawi, "Social Support for Resilient Livelihoods: Scalable Handbook," 2023, <http://www.nlgfc.gov.mw/index.php/the-star/documents/file/135-scalable-handbook-updated-january2023>

What does each trigger mean?

- 1 **Early-season rainfall:** Calculates low rainfall over a 30-day rolling window during the first half of the agricultural season (November to January) using TAMSAT satellite rainfall data.
- 2 **Full season rainfall:** Calculates low rainfall over a 30-day rolling window during the full agricultural season (November to April) using ARC2 satellite rainfall data.
- 3 **Evidence review:** Compiles available data on food insecurity based on the Famine Early Warning Systems Network (FEWS NET) Integrated Phase Classification (IPC), agricultural production, and food prices to evaluate conditions on the ground.

Source: Government of Malawi, "Social Support for Resilient Livelihoods: Scalable Handbook," 2023, <http://www.nlgfc.gov.mw/index.php/the-star/documents/file/135-scalable-handbook-updated-january2023>

Financing the Mechanism

The World Bank supported the GoM in modeling the expected cost of the mechanism as designed, and then in matching financial instruments to provide funding in a cost-efficient way.

Based on the initial design, the government decided to use a contingency fund to cover regular funding needs (that is, less severe and more frequent drought response) and to use a risk transfer instrument to cover the cost of larger scale-ups (that is, more severe and less frequent drought responses). The contingency fund sits within the SSRLP and was utilized in 2021/22 when funds were disbursed to participants following a request from the Secretary to the Treasury, as per the process in the Scalable Handbook.

The GoM is currently finalizing the procurement of a parametric risk transfer (or insurance) product linked to the primary trigger of the scalable mechanism. The contingency fund acts like a deductible to the risk transfer product, and the insurance product will provide additional financial protection in years will multiple districts trigger a scale up. The risk transfer component will be especially important as more districts come on board. Any payouts from this product will be made directly from the insurance company to the government's designated account at the Malawi Reserve Bank and disbursed to participants in the same way as transfers from the contingency fund.

It will be the first time such an insurance product has directly backed a risk model for social protection in the Africa region and this presented new challenges for government. Firstly, it took time for government to build up the expertise required to develop the terms of reference and then validate the policy and bids from potential providers. Secondly, this type of procurement is not typical for government, and the existing processes were not suitable or unclear in this context. For example, there were questions about the tax requirements and the legality of international insurers being involved, which is fundamental for reinsurance arrangements and capacity requirements. There was a need to further strengthen the procurement team in government through hiring of additional staff and this delayed the contracting significantly. In addition, the World Bank team supported the government to further develop their technical skills related to disaster risk financing and insurance to give them the confidence to place such a product.

Capacity Building

A task force comprising government officials from relevant ministries was created to design and implement the scalable mechanism.

The World Bank designed a learning roadmap, Disaster Risk Financing for Social Protection in Malawi, targeted at the task force and aiming to provide the information needed to make policy decisions in designing the mechanism. It included five sessions, each aligned strategically to progress on developing the Scalable Handbook. Building the technical capacity of task force members for disaster risk financing and adaptive social protection allowed government officials to make informed policy decisions to guide the design of the scalable mechanism, thereby increasing their ownership of it. All the content developed for the learning roadmap sessions was recorded in a workbook that served as a reference for the task force. While the learning roadmap was put together specifically to build capacity for Malawi, all the material can be easily tailored for other countries.

Once the mechanism was designed, training was also provided to officials from the Department of Climate Change and Meteorological Services (DCCMS) and other task force members in how to monitor the primary triggers of the scalable mechanism based on satellite rainfall data.



Copyright © Andrea Borgarello / World Bank

Implementing the Mechanism

Step by Step

In Malawi, the mechanism is implemented according to a series of steps:

- 1 DCCMS monitors the primary triggers from November to April.
- 2 The scalable coordinator gathers needed information for the evidence review between November and April and by May drafts a report that summarizes information on the season's conditions in each district. The report also indicates in which of the districts the SCTP should be scaled up and provides a cost estimation for the suggested scale-ups.
- 3 The scalable task force reviews and validates the report.
- 4 The scale-up is approved by the Principal Secretary of the Ministry of Finance, Economic Planning & Development.
- 5 Government mobilizes funds needed to cover the scale-up costs from the contingency fund and/or insurance claim.
- 6 Funds are channeled to pre-targeted beneficiaries using e-payments.

First Year Results

The first year of implementation, in 2021-2022, saw several noteworthy developments:

- **A scale-up was triggered in Ntcheu based on the early-season rainfall index.** DCCMS independently monitored the mechanism's rainfall triggers during the first year of implementation. In December 2021, DCCMS notified the task force that the trigger for scale-up had been reached in Ntcheu due to an unprecedented late onset of rain that resulted in failed plantings.
- **The task force also recommended a scale-up in Thyolo and Blantyre based on the evidence review process.** The poor rainfall conditions at the start of the season in these two districts were captured by the primary trigger, and they came close to reaching the threshold for scale-up in the two districts. Given the signs of drought, the task force conducted an evidence review that showed that livelihoods were affected by compounding shocks—lack of rainfall, a series of cyclones, and macroeconomic factors linked to the Russia-Ukraine conflict.
- **The implementation of the mechanism followed the steps outlined in the Scalable Handbook (and summarized above).** A report recommending the scale-ups was developed and approved by the task force by the end of the agricultural season in May, once all information on primary and secondary triggers had been compiled. The scale-up was then approved by senior officials, and funds to cover the costs of the scale-up reached government by early June. In alignment with improvements undertaken as part of the SSRLP, payouts for beneficiaries were handed through e-payments (figure 4).

Lessons Learned from the First Year of Implementation

The initial year of implementation provided several important lessons for stakeholders in Malawi and for others considering similar approaches elsewhere:

- 1 The implementation of an adaptive safety net requires strong government ownership and multi-sectoral cooperation.** To design and implement the mechanism, GoM set up a dedicated task force comprising officials from different ministries and led by a full-time coordinator. DCCMS independently monitored the primary triggers, which are based on two different satellite rainfall data sources, every 10 days at the start of the season and then monthly. The scalable coordinator monitored additional evidence. To further improve government ownership, during 2022/23 the team is planning to engage more closely with senior government officials by providing more regular updates on the progression of the season; the goal is to avoid surprises once the scalable report is finalized and submitted to senior officials for approval.
- 2 Pre-established rules and financing helped speed response.** Having pre-agreed rules clearly documented in the endorsed handbook means that decisions on response are made ahead of the event, so when funding is available there is no delay in distribution. This is of critical importance, especially for beneficiaries of SCTP who are more prone to fall deeper into poverty in the occurrence of a shock. The pre-agreed rules made the process of recommending whether to scale up the SCTP very fast. It took around two weeks for all the relevant information to be compiled into a report, which was then discussed among technical officials from relevant ministries, and which served as the basis for the recommendation on scaling up. Funds could also be requested very quickly (days after senior officials' approval), as expected costing was clear and funding was available.
- 3 It requires time and effort to build delivery systems that can provide rapid emergency assistance to households.** The social registry and payment systems in Malawi are still nascent, but promissory elements are being discussed under the SSRLP to continue and escalate investments on this area, especially to ensure interoperability with other sectoral databases. The first year of implementing the scalable mechanism helped identify key areas where some of these investments are needed to ensure that cash support is more reliable and predictable for target beneficiaries in coming years.
- 4 Global expertise is needed to design a well-functioning mechanism that uses remote sensing data.** Bringing in global expertise from within the World Bank and beyond helped strengthen the risk profiling and validation of the government's chosen trigger design. Details on the analysis conducted to design the trigger of the mechanism, jointly undertaken by Tetra Tech and the World Bank's DRFIP, are documented in the technical note 'Technical Analysis to Informing the Trigger Design for Adaptive Safety Nets to respond to Climate shocks in Malawi'.

Going Forward

GoM is now looking at options to further expand the mechanism, to integrate it with the broader social protection system and the other DRF instruments. Options include covering more districts, covering perils in addition to drought, and linking the trigger structure to other social protection programs (public work beneficiaries and/or graduation interventions) that could be leveraged when a shock occurs to reach more households. To cover the additional costs associated with expanding the program, the GoM is looking to mobilize resources from facilities such as the World Bank Crisis Response Window, to compliment the risk transfer and contingent financing resources.

For more information, please contact:

Evie Calcutt
Financial Sector
Specialist

ecalcutt@worldbank.org

Chipo Msowoya
Senior Social
Protection Specialist

cmsowoya@worldbank.org

**Alejandra
Campero**
Consultant

acampero@worldbank.org



Copyright © Andrea Borgarello / World Bank