Disaster Risk Finance for Social Protection in Malawi

SCALING UP THE SOCIAL CASH TRANSFER PROGRAM A WORKBOOK













INTRODUCTION

This workbook is intended to take you through an operational process so you can design a shock responsive social protection (SRSP) program after reading five different chapters that are each linked to a training session. Each chapter will provide background information about key steps of designing the SRSP program. The five chapters will also lead policy makers through a set of fundamental questions to stimulate discussions that will determine the shape and direction of the country's SRSP program.

In the case of Malawi, this workbook will be closely linked to the Social Support for Resilient Livelihoods Project (SSRLP), which has the objective of improving resilience among the poor and vulnerable population and of strengthening the national platform for safety nets. This workbook is particularly linked to the following project subcomponent: 1.2—Financing Scalable Safety Nets, which includes the design and implementation of a mechanism to scale up the Social Cash Transfer Program (SCTP) that will channel funds to poor and vulnerable households in the case of severe droughts (see figure 1 on the next page).

Figure 1. Malawi Social Support for Resilient Livelihoods Project (SSRLP)



Each chapter of this workbook will feed into the decisions that the Scalability Task Force members will need to take to complete the Scalability Handbook currently being drafted. The Scalability Handbook includes the principles, rules, operationalization, governance, and financing to make the SCTP shock responsive. The five chapters in the workbook are the following:

Chapter 1: Introduction to Shock Responsive Social Protection

The first chapter will provide background about these:

- The importance of SRSP systems
- The role of Disaster Risk Financing (DRF) in supporting SRSP
- The steps for designing a scalability mechanism and quiz about Kenya and Uganda case studies

Chapter 1 will help the Scalability Task Force members take stock of the work that has already been completed and of remaining gaps in designing a shock responsive SCTP. It will also help in identifying the ways in which capacitybuilding sessions and this workbook can help in filling the remaining gaps in order to complete the Scalability Handbook.

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Chapter 2: Data and Introduction to Triggers for Scale up of Social Protection Systems

This second chapter will help policy makers use data to design a country's risk profile. It will also help them set objective policy priorities that will guide the design of the SRSP program. The chapter includes the following steps:

- Review data availability regarding risks and poverty.
- Review readiness of social protection systems.
- Define policy priorities with respect to whom to protect, where to protect, and against what risk.
- Select the most suitable risk data sources to trigger social protection program scale ups that are based on well-defined criteria.
- Outline complementarity between different data sources to trigger a shock-responsive social protection program that will better reflect reality on the ground.



We will take a deep dive into this chapter during training session 2. The session will include input from technical specialists who have analyzed the available data for Malawi that could be used to build triggers for scalability mechanism of the SCTP. This information will help the Task Force make policy decisions that will then feed into the next step: the design and costing of a scalability mechanism.

Chapter3: Design and Costing of a Scalability Mechanism

The third chapter will help policy makers in setting key parameters to design a scalability mechanism for an SRSP program. The design of a scalability mechanism will be an iterative process that is based on financial costs, as well as on lessons learned from monitoring and evaluating future implementation.

Key parameters include these:

- When: Review of triggers
- Where: Geographical coverage
- Who: Number of beneficiaries
- How long: Number of months and timing of disbursement
- How much: Transfer amount

A training tool will be used to explore trade-offs between those design parameters and their cost implications.



In chapter 3 of the workbook, we will use a customized tool for Malawi so we can further deepen your understanding about the implications of changing the parameters of a scalability mechanism. This step will help the Task Force in setting the rules for the SCTP scalability mechanism that will then be reflected in the Scalability Handbook.

Chapter 4: Communicating With and Understanding Your Stakeholders

The fourth chapter will help policy makers understand the role of different stakeholders in designing and implementing the SRSP program. It will also help them better communicate to key counterparts and senior officials the objective, strategy and expected results (including its limitations) from using SRSP. Therefore, the chapter will cover these:

- Understanding and mapping your stakeholders
- Setting an institutional framework that shows the roles and responsibilities of stakeholders involved in the scale up process; also acknowledging that having clear roles speeds up response
- Communicating about your SRSP mechanism: Tips and Tricks



This chapter will help the Task Force fine-tune the section about governance framework in the Scalability Handbook. It will help clarify the roles and responsibilities of stakeholders who are in Malawi and are involved in operationalizing SCTP scale ups. It will also provide advice about how to communicate about shock responsive SCTP with colleagues, as well as with development and humanitarian partners.

Chapter 5: Financing the Mechanism

This fifth chapter will help policy makers structure different financial instruments that are available to fund the scalable mechanism and to outline considerations for financing efficiently. It will cover these:

- Risk layering and understanding the complementarity of different instruments to support SRSP
- Setting up the financial instruments for SRSP
- E-payments systems that are from the financial instrument to the beneficiary

In the case of Malawi, this chapter will focus on two financial instruments: (a) contingency fund (US\$10 million from the International Development Association) and (b) insurance (\$10 million for premium from the Global Risk Financing Facility). We will analyze how those two instruments complement each other and will outline the next steps to set them up.

CHAPTER 1: INTRODUCTION TO SHOCK RESPONSIVE SOCIAL PROTECTION

Today's global landscape is fraught with complex, often devastating shocks such as natural disasters, economic crises, pandemics, conflicts, and forced displacement. In the past 50 years, natural disasters have followed an increasing trend in terms of occurrence and human devastation. Climate change is expected to exacerbate those trends and, without climate-informed development, to push an additional 100 million people into extreme poverty by 2030. In addition, the COVID-19 pandemic is providing a vivid reminder of the devastating potential impact of pandemics on the lives and livelihoods of those who are directly and indirectly affected.

A growing number of governments are moving toward a proactive (and more cost-effective) approach to financial planning and disbursement systems. The approach protects national budgets as well as the lives and livelihoods of their residents from the impacts of disasters. Financial protection involves planning to better manage the cost of disasters, to ensure predictable and timely access to much needed resources, and ultimately to mitigate longterm fiscal impacts. Financial protection also involves establishing systems to channel available financial resources so they reach beneficiaries and ultimately protect lives and livelihoods of the poor and vulnerable.





What is Disaster Risk Financing and what are the key principles?

Core Principle 01:	Timeliness of funding-Speed matters, but not all resources are needed at once.
Core Principle 02:	No single financial instrument can address all risks.
Core Principle 03:	How money reaches beneficiaries is as important as where it comes from.
Core Principle 04:	To make sound financial decisions, you must have the right information.

DRF IN MALAWI. Malawi is one of two African countries to have a Disaster Risk Financing Strategy. This strategy includes the adoption of different financial instruments to respond to disasters of different types, as presented in figure 2.

In particular, the Catastrophe Drawdown Option (CAT DDO) in Malawi has been useful as it responds to the COVID-19 crisis. It disbursed US\$30 million to mitigate the likely shortfall in government revenue and in finance economic recovery initiatives from the crisis.

The Malawi DRF Strategy includes shock responsive social protection as an instrument to protect poor and vulnerable households from disasters. It makes provisions for scaling up social protection programs mentioning in particular SCTP—by leveraging systems such as the Unified Beneficiary Register.

FIGURE 2. DISASTER RISK FINANCING INSTRUMENTS IN MALAWI



RISK TRANSFER

Sovereign Risk Transfer

Considered: Public asset insurance **Re-considered:** Sovereign drought insurance **Past:** Weather derivatives



In place: Commercial agriculture insurance Under development: Agriculture insurance for small holder farmers Considered: Catastrophe insurance for households and businesses

Contingent Financing and Post-Disaster Loans

In place: World Bank CAT DDO (US \$30 Million, disbursed)

Under development: Scalable social protection (as part of the social support for Resilient Livelihoods Project)

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Contingency Funds and Budget Reallocations

In place: Legislations on unforeseen expenditures in the event of natural disasters **In place:** Strategic grain reserves

Under Development: Disaster Risk management fund (as part of the Malawi Disaster Risk Management Bill)

Emergency Funding -

Reconstruction

RISK RETENTION



What Is Shock Responsive Social Protection?

SRSP is the use of social protection as a tool to build the resilience of poor and vulnerable households when shocks occur. SRSP programs are easily scalable and are designed to assist the chronic poor during ordinary times and to expand assistance in response to a crisis or shock. By using existing social protection systems and programs to rapidly aid those most in need after a disaster, governments can safeguard livelihoods, can smooth consumption, and can build the resilience of the poorest and most vulnerable households—potentially helping to break the cycle of poverty and vulnerability that disasters often perpetuate.

Depending on their design and on the needs arising from the crisis, SRSP programs can scale up vertically. That is, they can provide the households already enrolled in social protection programs with more, or more frequent, benefits, or they can scale horizontally that is, add new beneficiaries (transitory poor) who have been made more vulnerable by the disaster. This approach scales up and leverages the existing social protection information and the targeting and payments systems. Such systems are used to identify potential scale up beneficiaries and to channel additional assistance that will reached them when shocks materialize (see figure 3). Shock responsive social protection—building social protection programs that scale up in response to disasters—will help to safeguard poor households' livelihoods and to improve their resilience to climate-related and other shocks.

FIGURE 3. SHOCK RESPONSIVE SOCIAL PROTECTION: VERTICAL AND HORIZONTAL SCALE UPS



How Does Disaster Risk Financing Support Shock Responsive Social Protection?

Using a DRF approach to support SRSP programs has the potential to rapidly deliver relief funding at the household level in the event of an emergency. DRF supports SRSP through the following:





Using data analysis to inform SRSP policy decisions: For social protection systems to respond to shocks, they must adapt to the changing needs among the affected population. DRF uses a variety of data sources including historical hazard data to (a) estimate the frequency and severity of shocks, (b) identify disaster-prone areas, (c) estimate the number of affected households, and (d) determine the amount of assistance required to cushion the impact of the shock on the affected population. This information sheds light on the anticipated contingent liability of using social protection programs to respond to shocks, and it helps policy makers make decisions that guide the design of SRSP.



Supporting the design and costs of SRSP: DRF helps in the design of SRSP, particularly through modeling scale up triggers that reflect the impact of disasters on the basis of data that are (a) timely, so that scale ups can be conducted not only quickly but also at points in time when additional transfers are most effective in minimizing harmful impacts of shocks; (b) relevant, so that the mechanism offers reliable protection; (c) objective and possible to audit, so governments can avoid subjective analysis or the risk of politicizing of the scale up decisions or both; and (d) available over a long time horizon. Once the design parameters of an SRSP program have been determined, DRF supports the costing of the scalability mechanism.



Supporting the governance framework and communication: DRF helps in considering the role of related stakeholders (data providers, Ministry of Finance, private sector, etc.) in implementing an SRSP program. DRF can also support policy makers in developing communication skills to present SRSP as part of a strategy that increases disaster protection of the population and government finances.



Financing of SRSP: DRF supports policy makers in developing a financing strategy to preposition appropriate instruments that will cover the costs of SRSP. This approach ensures that funding is made more readily available for quick disbursement through shock-responsive social protection programs—a key determinant in the timeliness of response. By extension, a DRF approach enhances the SRSP's effectiveness in protecting the well-being of affected households. Certain financial instruments can also be used to provide additional finance in the case of the less likely but severe events.

SRSP systems are being developed with support from the Disaster Risk Financing and Insurance Program at the World Bank through technical assistance to governments so those governments can design social protection programs that will rapidly assist vulnerable households affected by shocks. SRSPs are most effective when part of an integrated DRF strategy tailored to meet a country's specific risk profile through various instruments. Case studies about recent work supported by the Disaster Risk Financing and Insurance Program team are presented at the end of this chapter for Kenya and Uganda.

Why Is a Disaster Risk Financing Approach Important for Shock Responsive Social Protection?



1. A shock responsive social protection system that integrates a disaster risk financing approach can protect households against disasters that reduce food security.

In Ethiopia, the Productive Safety Net Program (PSNP) mitigated the post-drought drop in food security by 57 percent and fully eliminated the adverse impact on food security within 2 years (Knippenberg and Hoddinott 2017).



2. When shock responsive social protection integrates a disaster risk financing approach, early responses can lower the overall cost of a disaster by dissuading the affected households from engaging in negative coping strategies.

In Ethiopia, the cost of a drought to poor households increased exponentially over time: US\$0-\$50 for a 4-month delay versus US\$1,300 for a 6- to 9-month delay (Clarke and Vargas Hill 2013). A timely response is therefore less costly.





3. Where risk financing encourages predictable assistance through shock responsive social protection, the reduced uncertainty in the face of potential disasters also can enable households to invest in preparedness and adaptation.

In Mexico, municipalities participating in the drought index insurance program titled Component for the Attention of Natural Disasters—with similar properties to a shock responsive social protection program —increased expenditure per capita by 27 percent and income per capita by 38 percent (Clarke and Vargas Hill 2016).



4. Preplanning and prepositioning financing (with clear rules for its use) can also reduce uncertainty in government budgets around the role of social protection in responding to shocks.

In Uganda, a US\$10 million contingent line of credit finances drought response through the social protection system. The preestablished line of credit means the shock responsive social protection does not introduce any budget uncertainty to the Ministry of Finance, Planning, and Economic Development. It also precludes more expensive ex post financing options such as budget reallocations, which divert resources from high-yield investments (Clarke and Dercon 2016).



5. Financial planning for shock-responsive social protection also can increase country ownership and government leadership.

Using shock responsive social protection programs for disaster response places governments in the driving seat, along with the ownership and (importantly) the responsibility to deliver emergency resources to their citizens. Empowering governments to invest in their systems and capacities to manage shock response ultimately leads to a more sustainable system in the country (Bowen et al. 2020).



Six Steps to Design a Shock Responsive Social Protection Program

<mark>Step 1</mark> Develop a risk profile

Develop a risk profile for poor households to determine what threat is likely to have the worst impact on them. The risk profile helps determine the financial impact of disaster-

related shocks on poor households and relies on several sources:

- Household survey data
- Historical disaster response costs (government, development partners, and humanitarian partners)
- Hazard data
- Geographical coverage of safety nets
- Post Disaster Needs Assessments, reports by humanitarian partners, NGOs



Step 2 Decide on policy priorities

Determine policy priorities through the coordination of relevant ministries, for example, on these:

- Identification of target population and main hazard (who is to be protected and against what?)
- Identification of delivery channel or social protection program (how will funds reach beneficiaries?)
- Identification of source of finance and partnerships (who will pay?)



Step 3 Design the scalability mechanism

Design the intervention's scalability mechanism, including these:

- Determine trigger through data analysis.
- Determine number of beneficiaries through data analysis.
- Determine if SP systems support the scalability mechanism design.
- Determine geographical area to be covered.
- Determine transfer amount per household and duration of additional assistance.



- Develop models or tools or both to determine costs for different scenarios.
- Use information about potential cost of different scenarios to modify the scalability mechanism design parameters and to adjust costs to available resources.



Step 5 Finalize the mechanism rules and devise a DRF strategy

- Identify potential sources of financing to cover the costs of scaling up an SRSP program.
- Develop a DRF strategy for scalability that considers a risk-layering approach that combines different financial instruments.



Step 6 Include monitoring and evaluation.

- Collect and analyze monitoring and evaluation (M&E) data to assess performance and further improve the scalability mechanism.
- Share results of M&E with stakeholders to further improve the scalability mechanism.





Kenya: A Framework to Scale up the Hunger Safety Net Program

Through the provision of regular cash transfers, the HSNP aims to build resilience and to reduce household vulnerability. The HSNP operates in four arid counties in Northern Kenya - Turkana, Marsabit, Wajir and Mandera. Currently, it supports more than 100,000 of the poorest and most vulnerable households to receive regular cash transfers of around US\$27 per month. One of the key features of HSNP is the inclusion of a scalability mechanism that provides temporary emergency transfers during a weather-related disaster. To date the scalability mechanism has benefited more than 275,000 households.

The scalability mechanism of the HSNP has the following objectives:

- 1. Humanitarian response —To provide a fast and effective response to large proportions of the population during severe drought and other crisis events.
- 2. Resilience cushion—To support the resilience of poor and vulnerable population in response to regular, local climatic fluctuations.

Led by the National Drought Management Authority (NDMA), the HSNP is a core part of Kenya's National Disaster Risk Financing Strategy. HSNP scale ups are triggered using an early warning indicator, which is the vegetation condition index (VCI). VCI was selected because it reflects drought conditions for pastoralists in the four counties where HSNP scales up.

The HSNP scale ups to respond to drought are guided by four key principles:

- 1. "No Regrets" early responses: Response based on early warning indicators have a risk that funds will be released incorrectly to situations that turn out not to be a disaster. However, the benefits of acting early offsets this potential additional cost.
- 2. Objective triggers: Decisions to scale up in response to drought are triggered automatically using objective, pre-agreed, quantitative and auditable indicators for which reliable, time series data exist.
- 3. Scale up to predefined sets of households on the basis of poorest first: Households in the drought affected sub-counties are selected from the HSNP registering wealth order. This approach avoids the delay that arises by re-targeting as a crisis unfolds.
- 4. Independent monitoring: The program uses monitoring and independent evaluation to assess the effect of swift payments on the basis of objective triggers, and it examines how the process can continue to be improved.



Designing the Scalability Framework

The HSNP scalability framework was designed to guide decisions to scale up payments to households—beyond the routine beneficiaries—to respond to droughts by answering the following questions:

When? What information will be used to trigger a scaled up payment, and how frequently is this scale likely to be triggered?

Where? Which geographic locations need additional cash when a scale up is triggered?

Which households? What proportion of additional households in the identified geographic location should receive additional cash? Should routine HSNP beneficiaries also receive this cash?

How much? What amount should households selected for scale up receive?

How often? Should payments be made monthly or more or less frequently?

For how long? Over what duration should expanded payments be made, and when should they be scaled down?



To respond to those questions, the following matrix was built to guide the decision-making process to scale up the HSNP in response to drought. The matrix includes all the parameters and rules that build the HSNP scalability framework. (See table 1 on the next page.) TABLE 1: SCALABILITY FRAMEWORK FOR KENYA'S HSNP

Where?	When? (Trigger)		Who? (Coverage)	How Much?	How Often?	How Long?	
Geographic Location	Trigge Vegetat Conditi Index (N	er ion on /Cl)	Drought Phase Equivalent	Maximum Coverage of HHs to receive CT	Amount of Transfer (2015-16)	Frequency	Duration of Transfer
	≥35	Wet or No Drought	1 Normal	Routine HSNP HHs	Standard payment	Every 2 months	On-going
		Moderate Drought	2 Alert	Routine HSNP HHs	Standard Payment	Every 2 months	On-going
	20 to 35			Additional 10% of HHs beyond routine % only if another sub county in the county has hit the severe or extreme VCI threshold	Emergency single monthly payment	Every month	For each month VCI at severe drought status
Sub-County	10 to 20	Severe Drought	3 Alarm	Routine HSNP HHs	Standard payment	Every 2 months	On-going
				HHs beyond routine up to approximately 50% coverage in each sub county	Emergency single monthly payment	Every month	For each month VCI at severe drought status
	<10	Extreme Drought	4 Emergency	Routine HSNP HHs	Standard payment	Every 2 months	On-going
				HHs beyond routine up to 75% coverage in each sub location	Emergency single monthly payment	Every month	For each month VCI at extreme drought status

SOURCE: NDMA, STANDARD OPERATING PROCEDURES FOR SCALING UP HSNP PAYMENTS, 2020

In Kenya, many of the scalability mechanism parameters (e.g., payment amount) followed the rules for the regular HSNP. However, others were more difficult to set. For example, there were limited data about vulnerability to understand what proportion of a sub-county population would be affected by different severities of drought. Scaling to provide 100 percent coverage was considered unnecessary (and very expensive). A maximum coverage of 75 percent was established based on analysis of the post-rains assessments undertaken twice each year to estimate the proportion of the population in need of humanitarian support. Assessments during previous high magnitude drought had never put needs above 77 percent of a population, and on average the affected areas had identified 50 percent of households in need of food aid in drought years. Hence, the scalability guidelines adopted those coverage rates. The scalability mechanism parameters have also been refined over time to incorporate findings from monitoring and evaluation activities. For example, feedback from beneficiaries and implementers led to the inclusion of smaller scale ups in sub-counties that trigger for moderate drought when other sub-counties in the same county trigger for severe or extreme drought.



Costing the Scalability Framework

When one designs a shock responsive social protection program, understanding the cost implications of each parameter or rule change is extremely useful for policy makers (and the Ministry of Finance). Consequently, a financial budgeting model linked to the scalability framework is essential for design makers to assess the trade offs. The model should be capable of calculating not only the cost of a one-off response but also the costs of operating over the longer term (i.e., 10–20 years).

Figure 4 shows the results of the cost model for scaling up the HSNP in Kenya on the basis of the rules and parameters set in its scalability framework. The model shows the range of costs in very severe years as well as non-drought years, and it provides an average over all years. The figure highlights the volatility in the funding requirements for HSNP over time, as well as the challenges in setting up appropriate financial instruments to cover such requirements. This costing model has enabled policy makers to see that scaled up payments are required almost every year in response to severe drought while a scale up that triggered in response to extreme drought would be far less frequent (and hence less expensive).



FIGURE 4. MODELING THE COSTS OF SCALING HSNP TO THE DROUGHT IN KENYA

Designing a scalability framework is often an iterative process wherein the rules and parameters set ultimately depend upon what is financially feasible. In most cases, the needs generated at the household level by a shock will far outweigh any response that can be provided by governments, particularly in low- and middle-income countries. Nonetheless, having a tool that estimates changes in costs when the parameters in a scalability framework change can assist in establishing a compromise between different levels of response in terms of frequency, coverage, amount, and so forth. Knowing in advance the average and range of funding required to provide a limited but timely response is essential in developing a strategy for financing a shock responsive social protection program.



Financing a Strategy

HSNP scale ups to respond to weatherrelated disasters are financed through budget allocation from the Kenya National Treasury, which is supported by lending from the World Bank as well as DFID. The government of Kenya, however, is currently working on the preparation of a financing plan to meet the costs of shock responsive cash transfers in all HSNP counties by combining different financial instruments.





Establishing a Payments System

Kenya's HSNP is one of the best examples of putting a payment mechanism in place in advance of any disaster. Delivery of regular and emergency cash in HSNP is through a fully operational bank account that is accessible with an ATM card that can be used at HSNP special payment points or over the counter of a local bank. The banking enrollment of HSNP's regular beneficiaries, as well as potential beneficiaries for scale up, led to increases in financial inclusion. The coverage of households with bank accounts in the four poorest counties rose from being negligible to more than 90 percent. The HSNP payment infrastructure enables cash to be transferred to HSNP households through their bank accounts within approximately two weeks of a decision being made.



Lessons from HSNP Scale ups

Over the past three years, the mechanism has been triggered more than 20 times, and it disbursed more than US \$26 million to the vulnerable households. An evaluation of this intervention has shown that rapid response through HSNP scale ups builds the resilience of beneficiaries to shocks and reduces the overall cost of shock response for the government of Kenya.



Discussion Questions:

Step 2: Decide on policy priorities

What geographical area and hazard were selected to guide the design of the HSNP?

What social protection programs were selected in Kenya to make shock responsive, and how were systems strengthened?

What principles drive the design of HSNP scalability mechanism in Kenya?

Step 3: Design the scalability mechanism

What sources of data were used to trigger scale ups in the scalability mechanism in Kenya?

How does this relate to your own experience?

Step 4: Estimate the cost of scalability mechanism How was the costing done for the scalability mechanisms in Kenya?

Step 5: Finalize the mechanism rules and devise a DRF strategy

What sources of finance were mobilized to finance HSNP scale ups in Kenya?

Name two financial instruments which could be used to facilitate HSNP scale ups in Kenya and a pro and con of each.

Write down your 3 key take-aways from the Kenya HSNP Case Study?

Write down 1 thing you would do differently in Malawi?



Uganda : Establishing Triggers for Drought Response

In Uganda, the Northern Uganda Social Action Fund III (NUSAF) project includes a subcomponent aimed to design and implement a shock-responsive cash-for-work program to respond to droughts.

Developing a Risk Profile

Before the scalability mechanism of the cash-for-work program could be designed, it was necessary to put together a risk profile for poor households in Uganda. Data from the 2012–2013 Uganda National Household Survey showed that the Karamoja in northeastern Uganda had the largest concentration of poor people in the country. According to the survey, nearly three-quarters of the population in that area (74.2 percent) are poor, compared to under 20 percent nationally.

Data from the Ministry of Water and Environment showed that drought was the most significant and pervasive climatic shock in Northern Uganda and that the frequency of droughts is increasing. Drought is known to have devastating impacts on pastoralists and subsistence farmers in Karamoja because it harms livestock and crop production, which disrupts economic growth and livelihoods.

This information about where the poorest households are located and about which shocks have the worst financial impact helped policy makers in Uganda determine that the shock-responsive subcomponent should scale up in response to drought and be piloted in the Karamoja region.

Designing the Scalability Framework

As far as possible, decisions to scale up a social protection program should be triggered automatically using objective, pre-agreed, quantitative and auditable indicators for which reliable, time series data exist.

The government of Uganda selected an objective and automatic satellite indicator as the trigger to scale up the number of households accessing the cash-for-work program. The Normalized Difference Vegetation Index (NDVI) was selected as the indicator because it was shown to be accurate in reflecting drought conditions for the rangelands of Karamoja. The NDVI is observed on a 14-day basis, and an average score (or anomaly) is calculated for each calendar month by district in Karamoja. Table 2 (next page) presents the scalability framework for Uganda cash-for-work program.

TABLE 2. SCALABILITY FRAMEWORK FOR UGANDA CASH-FOR-WORK PROGRAM

Location	Primary Trigger	Drought conditions	Households covered by program	Daily wage for public works	Number of days per month	Duration of Works and Payment
By District	NDVI Anomaly Value ≥ -0.02	No Drought	Routine NUSAF HHs (currently 4% of households)	5,500 UGX	13.5	4 months
	NDVI Anomaly Value < -0.02	Drought	Routine NUSAF HHs (currently 4% of households)	5,500 UGX	13.5	4 months
			Additional households to cover a maximum of 15 to 20% of households in each District	5,500 UGX	13.5	4 months



The NDVI anomaly is an early indicator of drought, however the Government of Uganda was concerned that it would not perfectly match the ground conditions. Satellite-based indicators may be too simple and may not fully reflect localized hot spot crises. For example, some pastoralists may experience drought although the NDVI anomaly is greater than the threshold of-0.02 (or visa versa, the indicator may indicate drought when the conditions are okay). This mismatch between the ground condition and the satellite indicator is known as "basis risk".

To mitigate this concern, in addition to the NDVI as the primary indicator to trigger scale ups in response to drought, the cash-for-work program also uses the Integrated Food Security Phase Classification (IPC) as a secondary indicator to ensure a more robust scalability mechanism.

IPC was chosen because it consolidates wide-ranging evidence about food insecurity using data and evidence from several development partners. In Uganda, an IPC report is prepared annually. The report is then reviewed by an Inter-Agency Technical Committee, which makes a recommendation to the Permanent Secretary of the Office of the Prime Minister and the NUSAF III Director about whether to trigger the scalability mechanism on this basis. Note that a scale up based on the secondary trigger can be made for a crisis event only where no scale up has been triggered on the basis of the primary indicator. In the event where a scale up is triggered through the primary indicator, the secondary indicator is used only to contextualize the conditions, and it cannot be used to trigger the disbursement of additional funds. Box 1 presents an example where this dual trigger approach, using NDVI and IPC, was useful in Uganda.



Box 1. Evidence of the Government of Uganda's Scalability Mechanism in Action

In August 2016, during an el niño event that caused widespread drought on the African continent, the scale up threshold of the primary indicator of the cash-for-work program was met in six of the seven districts where the mechanism was operational. However, the secondary indicator showed clearly that the conditions in the seventh district were very similar to those in the other six, despite its failing to meet the primary indicator's threshold for a scale up. The secondary indicator was used as the basis for a scale up in this seventh district—an appropriate step given the very similar conditions in all districts across the entire region.

NUSAF's cash-for-work program scale up in response to the 2016 drought provided timely disaster assistance to about 30,000 households (150,000 people) in Karamoja—that is, to about 20 percent of households in the region. This number is in addition to the core beneficiaries of about 5,000 households (25,000 people) already receiving assistance. The scale up cost around US\$4.1 million that was rapidly drawn from an existing US\$10 million reserve fund that had previously been established as part of the NUSAF project scalability component.

Costing of the scalability framework

An excel-based financial model was developed to generate estimated multi-year costs of the NUSAF scalability framework, Historic NDVI anomaly monthly data was used to assess the frequency with which the scale up trigger was hit in each district over the last 15 years. The model then generated the costs of scaling up to the proposed 15 percent of households in the affected districts. The financial model estimated that scaling up the cash-for-work program on the basis of the scalability framework designed would cost in average of US\$1.2 million per year.

Financing Strategy

The Government of Uganda allocated US\$12 million to the shock responsive mechanism over the five-year life of NUSAF III, US\$10 million will be used to fund the scale up of cash-for-work program to households in the pilot districts when a scale up has been triggered; and US\$2 million will be used to build the system and to fund the development of capacity in Government.



Monitoring and Evaluation of the scalability framework

Details on monitoring and evaluation (M&E) activities of the scalability framework were incorporated into the Operational Manual from the beginning of the NUSAF project. Given the innovative nature of the scalability framework used in Karamoja, the scale up process was subject to an initial pilot period of six months from July – December 2016. The objective of this initial pilot phase was to test the mechanism and assess its implementation. This was followed by a full review where changes to the different components of the mechanism were made. After the initial pilot period, the scalability process continues to be subject to an annual review in December each year throughout the life of NUSAF III to draw lessons and continue to adjust as needed.

A substantial part of the M&E process consists of studies and surveys, including annual tracking studies, periodic beneficiary assessments, and impact assessments. Thematic/diagnostic studies are also carried out while implementation is under way to examine a range of relevant issues, such as the trigger's appropriateness and correlation with conditions on the ground, the ability of the scale up to address drought impacts, any evidence of increased resilience among beneficiaries (compared to non beneficiaries), and the role and impact of other assistance provided in the districts where a scale up is triggered.



Discussion Questions:

Step 1: Develop a risk profile

What data were used in the case of Uganda to build a risk profile?

Step 2: Decide on policy priorities

What policy decisions were taken in Uganda for the SRSP program on the basis of risk profile?

What geographical area and hazard were selected to guide the design of the SRSP?

What social protection programs were selected in Uganda to make shock responsive, and how were systems strengthened?

Step 3: Design the scalability mechanism

What sources of data were used to trigger scale ups in the scalability mechanism in Uganda?

How does this design relate to your own experience?

What are the key similarities and differences between the design of the scalability mechanism in Kenya and Uganda?

Step 4: Estimate the cost of scalability mechanism

How was the costing done for the scalability mechanisms in Uganda?

Step 5: Finalize the mechanism rules and devise a DRF strategy

What sources of finance were mobilized to finance SRSP in Uganda?

What financial instruments were set up to facilitate SRSP and DRF in Uganda?

Step 6: Monitoring and evaluation

What kinds of analysis are included in the M&E framework for the scalability mechanism in Uganda?

How frequently is analysis conducted?

Write down your 3 key take-aways from the Uganda Case Study?

Write down 1 thing you would do differently in Malawi?



EXERCISE: MALAWI IN FOCUS

Step 1: Develop a risk profile

1. What major shocks are likely to affect the vulnerable population in Malawi?

2. How frequently do the shocks occur?

3. How severe are the events when they occur (1 = mild, 5 = catastrophic)?
1. Mild 2. Negligible 3. Moderate 4. High 5. Catastrophic

4. Is there a region or district in your country where vulnerability is higher (higher poverty levels and disaster-prone)?

5. What sources of data could you use to get more details about the characteristics of shocks in Malawi (where do they occur, frequency, severity, losses, impact on the population)?

6. Please list 3 key actions steps to be taken toward developing a risk profile for Malawi

Please consider the following:

1. Does the program's coverage overlap with the people who might need to be protected against shocks?

2. Can the information (MIS) and targeting (UBR) systems of the SCTP adapt to vertical and horizontal scale ups?

3. Could the distribution channels to reach beneficiaries (payment system) allow for horizontal and vertical expansions?

4. Could a shock responsive SCTP be linked to any existing laws or regulations or both?

5. Please list 3 key policy considerations for setting up the program in Malawi.



Step 3: Design the scalability mechanism

What sources of risk data could be used to trigger SCTP scale ups? Data sources should ideally be:

- Objective (hard to politically influence)
- Transparent (pen data that can be easily accessible)
- Timely (available at early stages of a shock)
- Accurate (reflect what is happening in your country)

Please list 3 key design considerations for setting up the program in Malawi.

Step 4: Estimate the cost of scalability mechanism

When you design the scalability mechanism for the SCTP, what design features are likely to increase its cost?

Step 5: Finalize the mechanism rules, and devise a DRF strategy

1. How are shocks currently financed in Malawi?

2. Could there be benefits to reallocating some of the resources being used to finance shocks toward SCTP scale ups?

3. What sources of finance has the government of Malawi already secured to cover the costs of SCTP scale ups? Are there any additional sources that could be mobilized? For example, additional government budget or funding from development partners?

4. What combination of financial instruments are being explored (following a risk layering approach) to finance SCTP scale ups?



Step 6: Monitoring and evaluation

List 3 indicators that the M&E framework for SCTP scalability mechanism will record or examine that could help improve it in the future?

List 1 action that you will take this week at work and that will be based on this training session:



CHAPTER 2: DATA FOR AND INTRODUCTION TO TRIGGERS FOR SCALE-UP OF MALAWI'S SOCIAL CASH TRANSFER PROGRAM

As the frequency of disasters increases along with the human devastation they cause, a growing number of governments are moving toward a more proactive and cost-effective approach to response by improving financial planning and disbursement systems. As seen in the previous chapter of this workbook, this proactive approach can include the design of Shock Responsive Social Protection (SRSP) systems that utilize the principles of Disaster Risk Financing (DRF) and leverage existing social protection systems to rapidly and predictably deliver assistance to the most vulnerable households.

Taking transparent and informed policy decisions about the design of an SRSP program-for example who to protect and when to respond-requires data collection and analysis. **The focus of this chapter will be on using data to inform policy decisions on these design aspects.** The issues are further highlighted through a practical example from Niger.



Data Analysis to Understand Risk

DRF data analytics combines disaster risk information with financial methodologies and assumptions to empower stakeholders to take risk-informed financial and policy decisions, based on robust and thorough analyses.



Data Collection

There are three key questions to ask for data collection:



1. What type of data do you need?

2. What data sources can you use?



3. Is the data fit for purpose?

In the case of data needed to support decision making for SRSP, policy makers will likely require data related to past disasters, including their timing and severity, as well as data on the population's welfare and vulnerability to shocks and the likely funding available.

Data can be collected from a wide range of sources, such as government departments, the private sector, nongovernmental organizations (NGOs), civil society organizations, development partners, and universities. Different types of data can be categorized in a number of ways based on key characteristics; for example, when designing an SRSP mechanism, technicians often refer to data as either hard or soft:



Hard data is quantitative data generated from objective sources and methodologies. This information can be measured, traced, and validated.



Soft data includes broader sources of data such as those based on observations, like ratings, surveys, and polls, which may be susceptible to interpretations and opinions. It can have the advantage of reflecting conditions that are not captured by more narrow hard data.

Considering whether data is hard or soft has implications for how it can be used. In the context of a financial response to disasters, using hard—objective and reliable—data to capture the magnitude of a shock can help enhance trust among donors as well as the private sector. This type of data could for example be used in the design of market-based instruments.

The limitations of data analysis are directly linked to the quality and appropriateness of the data collected. It is therefore important to check whether the data is fit for purpose by considering issues such as the following:

- Quality of the data: Is there any data missing?
- Time period covered: The longer the time series available the better.

• Presence of unreliable data points or outliers: Is the data internally consistent and also consistent with other comparable data sources?

• Possible need to adjust data and combine it with other data sources.



Data Analysis

Once data has been collected, data analysis can provide relevant information regarding a country's risk profile that helps policy makers reach transparent decisions about setting up an SRSP.

Different types of analysis can be used. For example:

- Geographical analysis using maps and visual tools
- **Risk assessments** to obtain statistical measurements (such as average annual losses) that are estimated by using historical data and simulations of potential future events

• Econometric analysis to quantify household welfare drops due to shocks and to identify characteristics that might make households more vulnerable to these negative impacts

For more details, check out the Disaster Risk Finance Analytics online training:

Data Analysis to Inform Policy Decisions

Policy decisions related to the design of an SRSP program, such as where and when to scale up, need to be based on objective data if they are to be transparent and robust. To determine **where** to prioritize the mechanism, it's important to review the historical impact of droughts on communities. To decide **when** to scale up, a drought indicator and threshold trigger need to be selected.

Policy Decisions for SRSP Design

When implementing an SRSP mechanism the design needs to consider money out-that is, how to provide timely funds to the most vulnerable when the trigger for scaleup is met; and money in-that is, how to finance the cash transfers. The remainder of this chapter focuses primarily on money-out issues, while money-in issues are the focus of chapter 5 (where we will explore how to efficiently fund the mechanism using an IDA contingent grant and a risk transfer instrument in Malawi).

Irrespective of where the finance comes from, avoiding delays in the release of funds requires pre-agreed procedures and protocols so that funds can be transferred to ministries or departments that operate social protection programs and then disbursed to the beneficiaries. DRF data analytics can help policy makers design these procedures, ir particular to develop a risk profile to better understand the risks and their impact on poor and vulnerable households.

A risk profile should provide answers to defined questions that allow policy makers to take important decisions throughout the process of setting up an SRSP program.



Policy decisions are needed to answer questions like these:

What risk should the SRSP program protect people against? For example: During preparation of the Social Support for Resilient Livelihoods Project, it was agreed that the initial focus would be on droughts.

Where should the SRSP be implemented as a priority? Where do the most vulnerable households live? Where are the risks most likely to materialize?

When will a scale-up be triggered? How severe do the conditions need to be for additional resources to be disbursed?

Who shall be protected through the SRSP? Who are the households that are worst impacted?

How will the funds reach the beneficiaries? How can existing social protection programs be leveraged as delivering mechanisms?

How long should additional assistance be provided to affected households through SRSP when a shock occurs?

Where to prioritize implementation

When it comes to weather-related risks, Malawi is a very heterogenous country; with varying climate conditions across its regions. Therefore, when deciding on where to prioritize an SRSP mechanism to respond to drought, it is important to analyze the drought conditions over time to determine which districts and people are most vulnerable and would benefit the most.

How funding reaches beneficiaries is as important as how funds are secured in the first place, and so up-front investments in social protection systems are critical. The stronger the existing systems for delivering benefits (Unified Beneficiary Registry [UBR], Management Information System [MIS], and e-payments), the higher the potential to use them in times of emergency. When deciding where to implement the SRSP mechanism, it is first important to consider which districts have the systems in place to ensure that when the trigger has been met, the funding can reach beneficiaries within the given time frame.



When to scale-up

Once you've decided what disaster risks you want to protect against (in the case of the Social Cash Transfer Program [SCTP] it will be initially drought), a critical decision has to be made on when a response will be triggered. Triggering too early or too often will increase costs and affect affordability of the program, but triggering too late may undermine many of the benefits of an early response.

To understand the severity of droughts in the chosen districts, the mechanism can rely on quantitative weather-related data and indexes. For example, droughts can be measured using a range of meteorological indicators that use modern technology, specifically satellite-generated remote sensing data, to track agroclimatic variables, such as rainfall and vegetation development. Consequently, historical data on droughts can be analyzed to provide reasonably clear estimates of the likelihood of such events occurring in the future and projected costs of responding to these future disasters. This information is referred to as the risk profile.

The complex relationship between vulnerability and risk means that disaster definitions need to adapt to reflect the impact on target populations in a specific geographical area. Understanding the risk faced by a particular population involves calibrating standard disaster definitions of climatic shocks to the local context. Data on shocks therefore needs to be combined with data on population vulnerability, which includes the following:



Poverty and prices – including poverty rates, consumption levels, assets, savings, labor rates, and prices of staple foods, crops, and livestock.



Livelihood patterns – including sources of income, agricultural production systems (e.g., types of crop), and reliance on livestock.



Geography – including altitude, soil type, and proximity to water sources.

Services and infrastructure – including access to health and education services, proximity to good roads, and access to water, markets, and mobile networks.



Timing – referring to the point at which a shock hits—e.g., just before or just after a harvest-since this can affect the shock impact.



Choosing a drought indicator

Determining when and to what extent a social protection program scales up following a shock requires a transparent, rules-based approach. In practice this means selecting an objective data indicator to monitor drought conditions. It also requires predefining a threshold for comparison against this indicator, which when met triggers a response. This pre-agreed and transparent indicator and trigger threshold avoids politicizing responses.

The efficacy of an SRSP mechanism depends on the design of the underlying triggers on which any payout will be based. It is therefore important that the indicator used in designing any mechanism should be based on reliable data that meet the following criteria:

Simple. Data used should be simple so it can be clearly communicated to and understood by all relevant stakeholders. Easy access to it is also important for monitoring over time.

Objective. The trigger should be based on objective, quantitative, and auditable indexes with there is a clear evidence base. Objective data includes remote-sensing data

as well as yield data or other food insecurity measures.

Accurate. The data and index selected must be operationally relevant and reflect as accurately as possible the shock impact on welfare conditions on the ground.

Timely. Up-to-date data for the trigger must be regularly available to allow for a timely response. Ideally, reliable time series data will exist for the last 20 to 30 years, although sensitivity tests should be performed to allow for climate change impacts on underlying data (this may result in more weight being placed on data in more recent years).

Modelable. Particularly in the case of primary triggers, data should be probabilistically modelable to more accurately estimate future financial needs. Triggering a scale-up based on modelable data is necessary in some cases, such as when some of the costs associated with scale-ups are expected to be covered by a risk transfer instrument.



Ensuring a robust triggering mechanism

Caution over the power of triggers is needed because a single trigger—say one based on a hard data source like satellite-generated remote-sensing data, will not perfectly correlate with the conditions on the ground (this mismatch is technically referred to as *basis risk*). The triggering mechanism for scale-up can therefore be based on more than one data source or indicator. Different data sources may complement the information each provides, thereby increasing the accuracy of the triggering mechanism to better reflect changes in households' welfare conditions due to the impact of disasters and ensure there is flexibility in the system to respond even if a primary trigger is not met.

Drawing from the experience presented in the case studies for Kenya and Uganda in chapter 1, the Social Cash Transfer Program (SCTP) in Malawi is intended to scale up using a dual-trigger approach, as follows:

1. The **primary hard trigger** is based on remote-sensing data used to capture the impact of drought. This should be modelable so that a risk transfer product can be used as a financial instrument to cover the costs of SCTP scale-ups.

2. **The complementary secondary trigger** based on remote-sensing, food insecurity, and/or agricultural data is used as a fail safe way to capture the impacts of drought that might not be captured under the primary trigger.

A key difference between Malawi and countries like Kenya and Uganda is that Malawi has predominantly rain-fed crop-based agriculture, whereas northern Kenya and the Karamoja region of Uganda are rangelands with pastoralist communities reliant on livestock. For rangelands, vegetation data such as a Normalized Difference Vegetation Index (NDVI) is a good informer of ground conditions, while this is not necessarily the case for crop cover.

Validating triggers

The accuracy of a trigger to reflect the impact of disasters is validated using statistical analysis. For example:

• Data can be validated by checking its consistency with other data sources used, such as data used by the meteorological department for seasonal drought forecasting.

• Data can be validated by correlating it with conditions on the ground, using data on agricultural losses, food security scores, and feedback from households.

Indicators and corresponding triggers for SRSP should be reviewed on an ongoing basis to make sure they accurately reflect the impact of disasters as the environment changes, due for example to changes in households' resilience, changes in disaster trends driven by climate change, etc.



Complementing existing initiatives

In the design process, policy makers should consider the complementarity of the mechanism with other existing disaster response interventions. This is to ensure that the limited funding available provides the best value and does not duplicate other efforts. For example, SRSP might be part of a larger DRF government strategy that considers multiple instruments and mechanisms to respond to disasters using a wide range of triggers. In addition, setting up an SRSP program also needs to consider other disaster response initiatives led by NGOs and humanitarian partners. By considering the trigger mechanisms of existing interventions, SRSP can better align to them and fill any existing gaps in disaster response, thus making it more cost-effective.





The main cash transfer program in Niger provides a monthly transfer of CFAF15,000 (~US\$27) to around 50,000 households. Through the World Bank-supported Adaptive Safety Net Project 2, additional financing was made available to the government of Niger to finance a pilot for scaling up this cash transfer program to provide additional assistance in response to droughts.

The government faced challenges in designing this pilot due to the difficulty in accessing early warning data on climate shocks. Most of the early warning systems in the country tracked indicators describing the impact of drought (e.g., food security, agricultural production.) rather than the climatic event itself. Given this limitation, the government decided to use a satellite-based trigger to scale up the cash transfer program to additional beneficiary households in selected communes.

In order to select the data to be used as the basis for the cash transfer program scale-up trigger, the government established two criteria: (a) data should be easily accessible; and (b) data should be available by the end of the rainy season at the latest. Data was then collected from different sources to conduct statistical analysis (see table 1).

TABLE 1: DATA AND INDICATORS CONSIDERED FOR SCALE-UP TRIGGER IN NIGER

Data	Indicator	Time period	Source
Rainfall	Cumulative rainfall Dry spell (number of consecutive days without rain)	Daily data 1981–2018	CHIRPS
NDVI	Normalized difference vegetation index	Dekadal data 1981–2018	MODIS
Temperature	Extreme heat degree days	Daily data 1981–2018	MODIS
WRSI	Water requirement satisfaction index	Dekadal data 1981-2018	FewsNet
Price	Millet prices	Monthly data 1985-2018	SIMA
Production	Millet production	Monthly data 1985-2018	Ministry of Livestock and Agriculture

Following a full review of the available risk data, the government adopted the water requirement satisfaction index (WRSI) as its index for monitoring drought conditions and for determining when those conditions are severe enough to trigger the scale-up of safety net programs at the end of each rainy season. WRSI is an indicator of crop performance based on the availability of water to the crop during a growing season; as key inputs, it uses rainfall data, a soil map, and a land use map. While statistical analysis found that rainfall, NDVI, and WRSI were all positively and significantly correlated with millet production, WRSI was found to be its best predictor.

The program in Niger represents the first time that this technical design has been implemented. Other social safety nets that target vulnerable pastoralists—for example, the Hunger Safety Net Programme (HSNP) in Kenya or the Northern Uganda Social Action Fund (NUSAF)—have used scale-up triggers based on rangeland surveillance indicators. This approach was not suitable for the context of Niger, where millet farmers were to be the main beneficiary group.



The World Bank supported the government of Niger in building a tool that uses data and analytics to calculate both the number of potential additional beneficiaries and the cost of scale-ups over time. Actuarial techniques were then used to turn this historical cost into an understanding of the potential future costs of the program.



FIGURE 2: HISTORICAL COST OF SCALE-UPS USING DATA FROM THE WRSI FOR COMMUNES IN NIGER

Recognizing that not all shocks are captured by WRSI, the government of Niger aimed for a "no regrets" approach and adopted a secondary trigger based on the Integrated Food Security Phase Classification (IPC). This secondary trigger is used only in years when no-scale up has been triggered based on the primary indicator and based on the decision of the Steering Committee.

Several other relevant parameters were selected by the government of Niger for the pilot:

• Where? Eight communes were selected in three regions: the communes were those benefiting from the regular cash transfer program, in regions with millet production and high vulnerability to drought.

• When? The selected thresholds were based on deviation from the long-term median:

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• Moderate drought (-10 percent deviation) → Scale up to 22 percent of total population in each commune
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• Severe drought (-25 percent deviation) → Scale up to 44 percent of total population in each commune

• How much and for how long? Monthly transfers of CFAF15,000 (~US\$27) will be provided for 12 months.

CHAPTER 2: EXERCISE: MALAWI IN FOCUS

1. In order to determine policy priorities, how might you identify the historical years in which districts experienced really bad droughts?

2. What other drought response or related initiatives are currently in place? Please consider initiatives both by government and partners.

3. Can you give an example of a primary or secondary trigger that some of these initiatives currently use to inform disaster response?

4. In the table below are some potential data sources to use for a triggering mechanism. What advantages and disadvantages do you think each of these sources might have?

Sources	Advantages	Disadvantages
Household survey data from public sources		
Remote-sensing data on weather or ground conditions		
Data on disaster losses from governments, partners, or private sector		
Data on historical disaster response from governments or partners (and use of safety nets)		
Information on other existing safety nets from governments and partners		
Reports by NGOs and humanitarian organizations		

5. What progress has been made in adapting existing SCTP systems across districts to allow the program to scale up? Please answer for the three SCTP systems below.

Unified Beneficiary Registry (UBR):

Payment system:

Management Information System (MIS):

6. What is your key learning from the experience of Niger, and how does this help you in your work in Malawi?



The following questions can be answered with the detailed presentations during session 2 of the training:

7. What districts do you think the SCTP scalability mechanism should focus on as a priority? Please list your top three districts and explain why you would choose them.

8. What drought indicator and other data sources would you select as the primary and secondary triggers of the SCTP scalability mechanism? Please explain how your choices relate to the criteria for trigger data selection (simple, objective, accurate, and timely).

9. Once the mechanism is in place, how would you propose validating the triggering mechanism?

References

Bowen T., C. del Ninno, C. Andrews, S.Coll-Black, U. Gentilini, K. Johnson, Y. Kawasoe, A. Kryeziu, B. Maher, and A.Williams. 2020. Adaptive Social Protection: Building Resilience to Shocks. International Development in Focus. Washington, DC: World Bank.

Clarke, D., and S. Dercon. 2016. Dull Disasters? How Planning Ahead Will Make a Difference. Oxford, UK: Oxford University Press.

Clarke, D., and R. Vargas Hill. 2016. "Disaster Risk Financing as a Tool for Development." Report. World Bank and Disaster Risk Financing and Insurance Program, Washington, DC.

Clarke, D., and R. Vargas Hill. 2013. "Cost-Benefit Analysis of the African Risk Capacity Facility." IFPRI Discussion Paper 01292. International Food Policy Research Institution, Washington, DC.

Knippenberg, E., and J. Hoddinott. 2017. "Shocks, Social Protection, and Resilience: Evidencefrom Ethiopia." Ethiopia Strategy Support Program Working Paper 109, International Food Policy Research Institute, Washington, DC.

Maher B., C. Fitzgibbon, and A. Solórzano. 2018. "Emerging Lessons in Financing Adaptive Social Protection." Background Paper for the World Bank, Oxford Policy Management, London.



Glossary

Basis risk	The difference between the payout triggered by the mechanism (such as a scalable safety net) and the actual losses experienced by the protected party (in this case vulnerable households) that are attributable to the defined peril.
Contingency fund	A reserve of money set aside to cover possible unforeseen future expenses.
Contingent Liability	Financial obligations that crystallize when a potential but uncertain future event occurs.
Disaster Risk Finance	Increasing the Financial Resilience of the national and subnational governments, businesses, households, farmers, and the most vulnerable against natural disasters by implementing sustainable and cost-effective financial protection policies and operations.
Hazard	Something that is dangerous and likely to cause damage. In the context of SRSP, hazards could be for example: droughts, floods, earthquakes, pandemics, etc.
Index	This is a pre-defined event metric, for example the amount of rainfall in a period.
Risk Transfer	Risk transfer involves one party assuming the liabilities of another party. Purchasing insurance is a common example of transferring risk from an individual or entity to an insurance company.
Shock responsive social protection	Social protection programs that scale up in response to disasters—help to safeguard poor households' livelihoods and improve their resilience to climate-related and other shocks.
Trigger (Hard/ Soft)	The threshold of the index at which a pre-agreed pay-out is made (or 'triggered'), regardless of the impact on the ground. A 'hard' trigger is one that is based on objective, pre-agreed, quantitative and auditable indicators. A 'soft' trigger provides more subjectivity, for example based on the data available a technical committee may decide whether to trigger a payout and for how much.



Thank You

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