

Developing Costed-Contingency Actions and Undertaking an Analysis of Pre-arranged Financing for Shock-Responsive Social Protection: A focus on Azerbaijan, Bosnia and Herzegovina, and Tajikistan

Summary



Executive Summary

The frequency and severity of natural hazards are increasing due to climate change, posing significant risks to global health, economic stability, and social development. Between 2001 and 2020, reported medium- and large-scale disasters surged to 350–500 annually, compared to 90–100 annually between 1970 and 2000. Natural hazard related disasters cause economic losses exceeding \$300 billion annually and impoverish approximately 26 million people each year. Poor and vulnerable groups, including farmers and female-headed households, are disproportionately affected.

Shock-responsive social protection (SRSP) as cash transfer programmes in post-disaster settings offer several benefits, including mitigating the use of negative coping strategies, safeguarding livelihoods, preservation of dignity and choice, asset preservation, cost-effectiveness, and linking humanitarian assistance and development. Cash-based approaches are often more efficient and rapid in addressing immediate needs than traditional commodity distribution. Whilst cash transfer programmes ahead of shocks can help to address the underlying causes of vulnerability or build resilience, post-disaster cash transfer programmes are critical in aiding affected populations by providing urgent assistance for

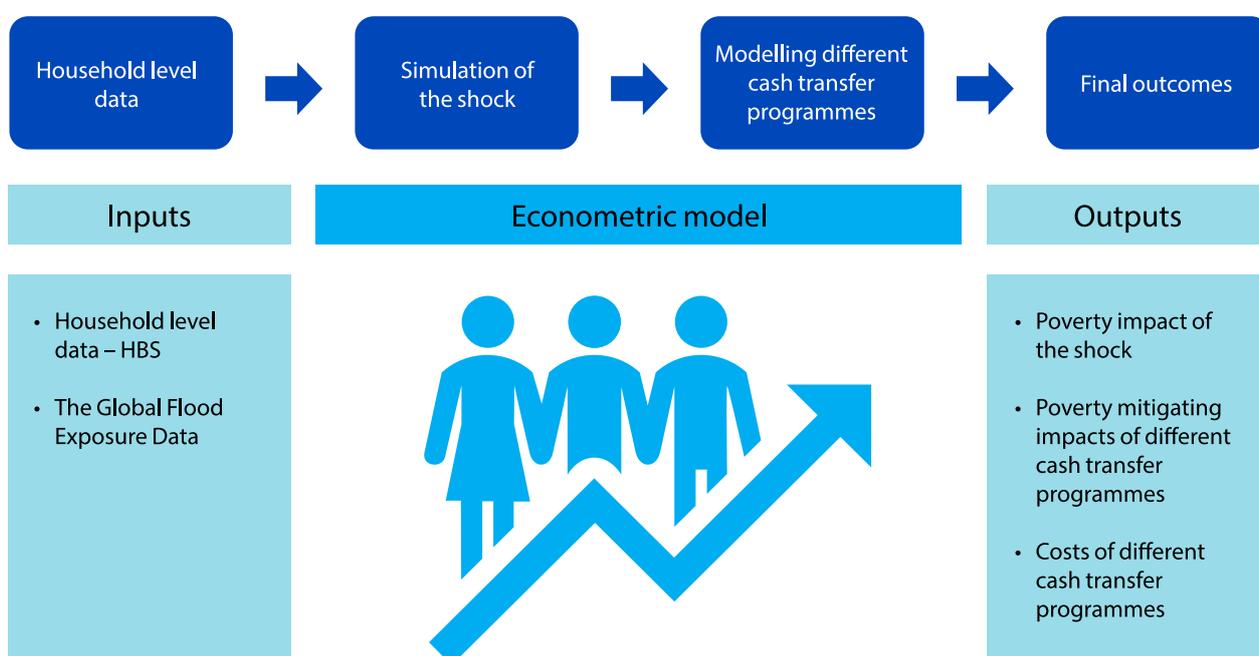
necessities like food and shelter. When linked with triggers, cash transfers can also be used as anticipatory action to reach exposed households before the impacts of a shock are felt.

Effective SRSP hinges on understanding the role of social protection in crisis prevention and response, estimating costs and benefits, and identifying funding sources. In this respect, the study "Developing Costed-Contingency Actions and Undertaking an Analysis of Pre-arranged Financing for Shock-Responsive Social Protection: A focus on Azerbaijan, Bosnia and Herzegovina, and Tajikistan" had three main components: (i) supporting the development of national contingency actions for scaling up timely cash assistance in emergencies, using evidence through the development of **simulation models** and interactive tools that enable policy makers to see the costs/benefits of cash assistance, (ii) presenting **an analysis of pre-arranged finance for SRSP**, exploring possible mechanisms that could fund the rapid scale up of national cash assistance in emergencies across different hazards and (iii) **Capacity Building Sessions**, designed to empower and equip stakeholders with the knowledge and skills necessary to navigate the project's key domains and outputs.

This report offers: (i) a detailed analysis of the estimated socioeconomic impacts of floods across three countries—**Azerbaijan, Bosnia and Herzegovina, and Tajikistan**—along with an evaluation of the effectiveness of various SRSP measures; and (ii) an exploration of how SRSP has

been financed historically, as well as an examination of potential future financing options for the case countries. The findings are organized into policy briefs for each country, complemented by a cross-country comparison section that discusses the broader implications.

Figure 1 The microsimulation takes data from a sample of individuals which is representative of the population, and then models the impact of floods and the consecutive cash transfers on the income/expenditures of this sample, to estimate their implications for an entire population



Methods

Simulation Model

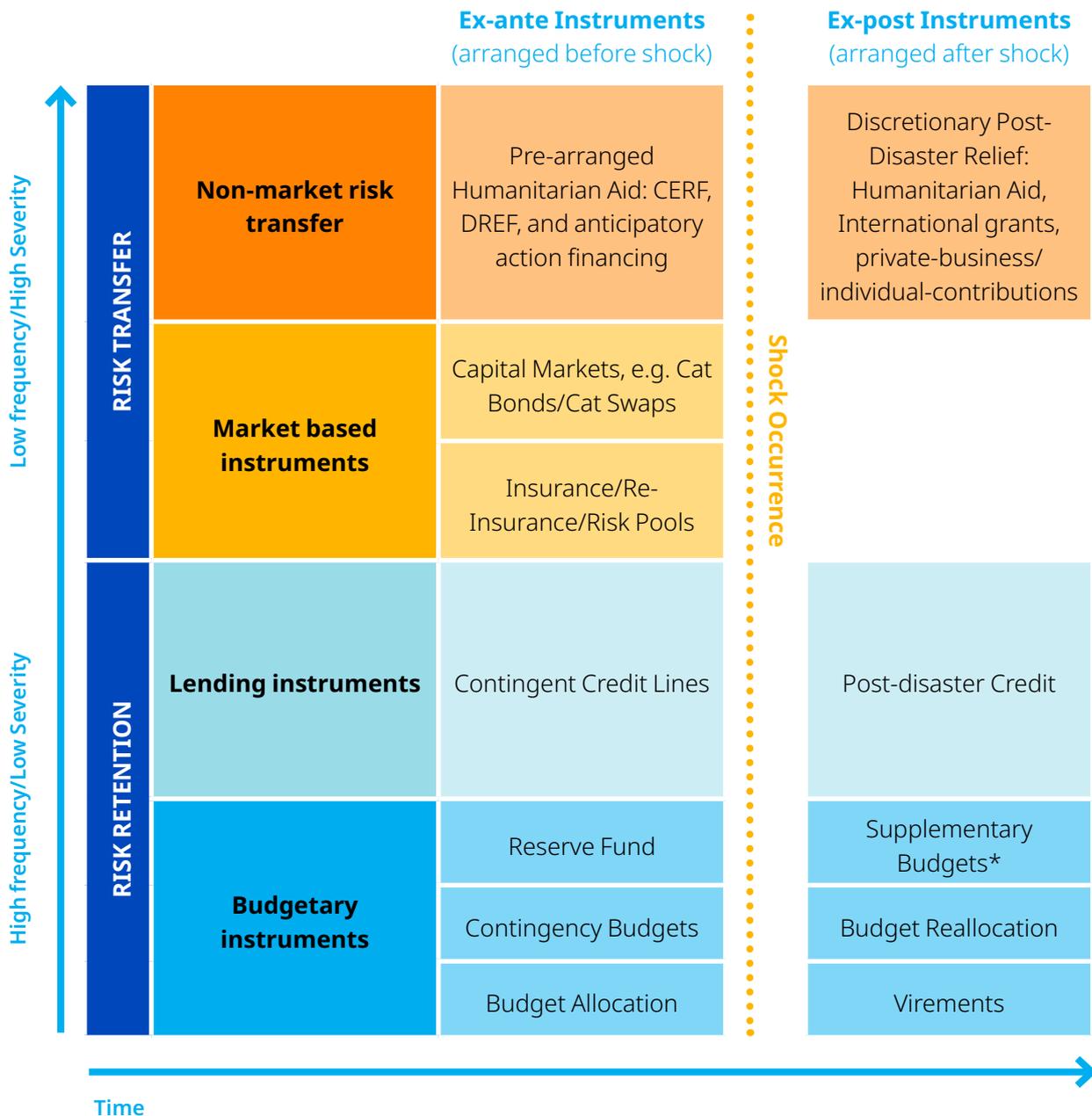
Microsimulations are valuable tools for estimating the impacts of shocks and policy changes on different outcome variables including poverty. They also support anticipatory actions by forecasting impacts of policies and enabling proactive decision-making. A microsimulation takes data from a sample of individuals or households which is representative of a population, and then models specific policy changes on this sample, to estimate their implications for an entire population.

The **simulation models** developed for each country employed a consistent methodology, utilizing nationally representative household budget surveys collected by the countries' Statistical Offices. The simulation developed for this report models the effects of a severe flood and several SRSP cash transfer scenarios that are to be distributed in the aftermath of the flood. The simulation estimates the impact of the flood on poverty in each country, modelling household income and expenditure changes due to employment income loss (direct impact), asset damages and housing repair costs (direct impact), and an impoverishing impact due to a rise in

inflation (indirect impact). SRSP cash transfer scenarios with different targeting criteria and transfer size are examined to determine their effectiveness in alleviating post-shock poverty. The scenarios are assessed and an analysis of

them through use of different metrics and budgetary considerations is provided in the report. The focus here is on poverty, driving both the causes and consequences of increasing disaster risk.

Figure 3 UNICEF’s Disaster Risk Financing Framework



Source: UNICEF (20230)

An interactive tool complements the study, enabling dynamic adjustments of parameters like

transfer values and targeting criteria to support preparedness and improve SRSP planning.

Analysis of Pre-arranged financing for SRSP

UNICEF's Disaster Risk Financing Framework (UNICEF, 2023) was used as the analytical framework for this part of the study (See Figure 3). This framework differentiates between 'risk retention' where the government retains responsibility to pay for the impacts of the disaster, and 'risk transfer' where external parties take on responsibility for paying for the disaster, sometimes in return for a fee (with market-based instruments). The framework also sets out both 'ex-ante' and 'ex-post' instruments with those in the ex-ante representing pre-arranged finance (i.e. financial instruments that have been pre-arranged ahead of a shock). Data collection methods for the analysis included desk-based documentary reviews and key informant interviews (KIIs).

Findings

Simulation Model

This report presents the simulated impact of a severe flood on the case study countries and the expected increases in poverty. The findings show that the cost of inaction (i.e. not supporting households with SRSP) is high, as evidenced by substantial rises in poverty levels. Across Azerbaijan, FBiH, RS, and Tajikistan, simulated flood impacts reveal significant increases in poverty, with direct and indirect effects on populations in affected regions. The cost of not providing SRSP for a 1-in-100 year flood is estimated to result in an increase in poverty ranging between 4.4 to 123.7 per cent in the affected regions depending on the case country.

Monthly cash transfers aimed at different population groups demonstrate notable potential to mitigate poverty. One of the scenarios targets all directly flood-affected households (the households that are assumed to be flooded and experiencing direct damages). Another scenario focuses on a subgroup of these households, specifically the

social assistance beneficiaries among the directly flood-affected. The rest of the three scenarios target people in the flood-affected regions based on specific targeting criteria (being social assistance beneficiaries, children and children in the bottom 80% based on post-flood household expenditure level) without considering whether the household is directly affected or not.

Cash transfers play a pivotal role in supporting households in the aftermath of disasters, offering them a means to stabilize their lives. The findings underscore the substantial impact that cash transfers can wield after a shock such as a flood. The report examines and compares various cash transfer scenarios shedding light on their potential for mitigating the impact of floods on poverty as well as looking at other metrics such as population coverage, costs and cost-effectiveness.

A commonality across the countries is the trade-off between cost-effectiveness and poverty mitigation. Scenarios targeting broader groups, such as all households directly affected by floods (Scenario 1), generally achieve greater post-shock poverty reduction but naturally come with higher costs. In contrast, narrower targeting strategies, such as focusing on social assistance beneficiaries among the directly flood-affected (Scenario 2), are more cost-effective but less effective at alleviating post-shock poverty for the broader population. These findings underscore the need for strategies that balance fiscal constraints with the goal of avoiding increases in poverty as a result of the shock. It should be noted here that the study differentiates between pre-shock poverty (i.e. poverty levels before the shock occurred) and post-shock poverty (i.e. increases in poverty as a result of the shock), with the aim of these SRSP temporary cash programmes aiming to avoid increases in post-shock poverty.

Differences also emerge in the relative performance of cash transfer scenarios due to regional contexts. In Azerbaijan, FBiH and Tajikistan, broader scenarios targeting children or

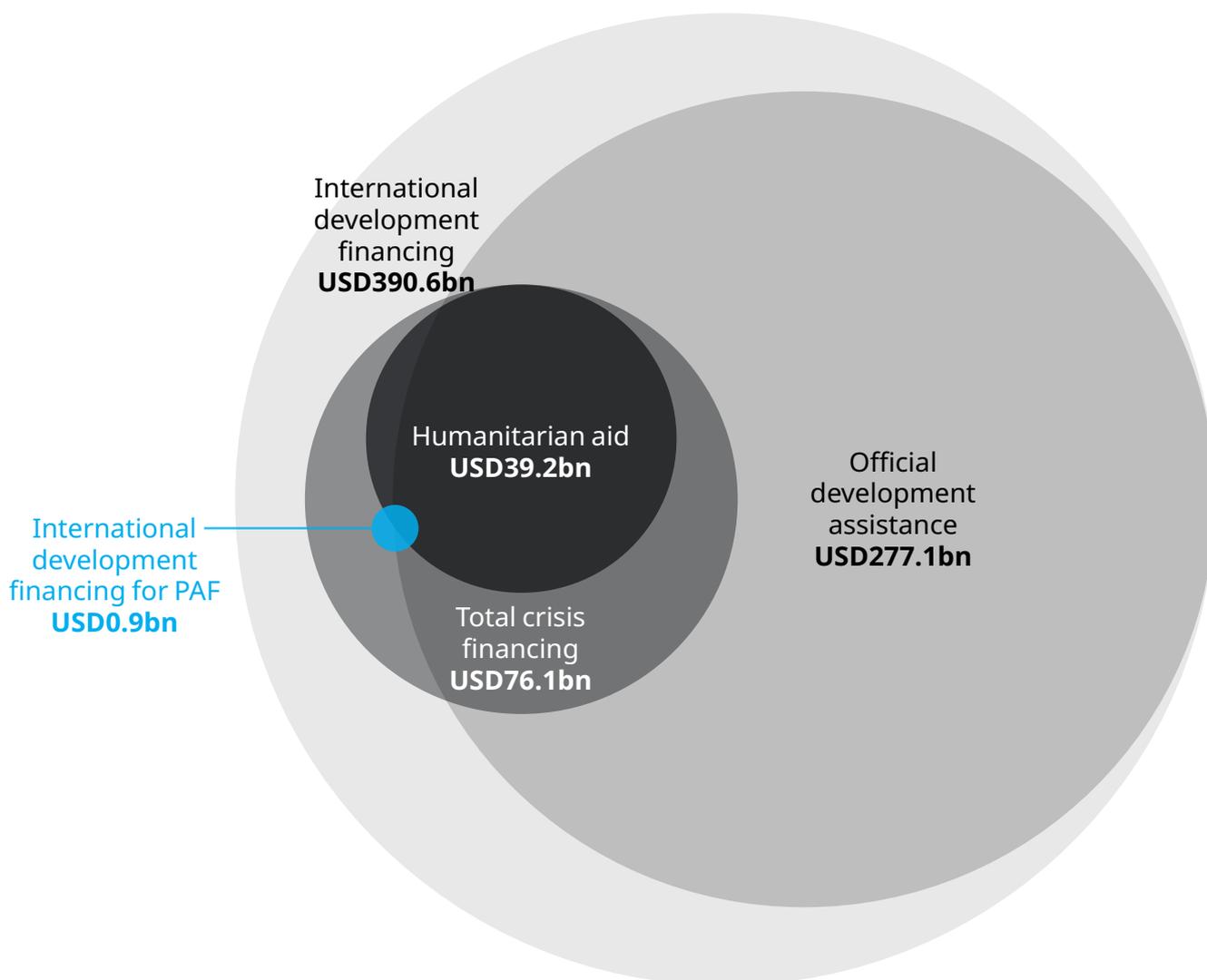
all flood-affected households tend to align with higher coverage and more significant post-shock poverty alleviation. Conversely, in the entity Republika Srpska of Bosnia and Herzegovina, the scenario focusing on existing social assistance beneficiaries (Scenario 3) is also effective in mitigating post-shock poverty, leveraging existing systems. These differences highlight the importance of tailoring cash transfer designs to each region's demographic, socioeconomic, and institutional contexts to achieve the best outcomes, but also highlights the importance of ensuring systems are prepared to operationalise the desired design (i.e. if the objective is high coverage then the usefulness of having an existing social registry to enable rapid targeting).

The report underscores the critical importance of adopting a holistic approach and identifying and agreeing upon the metrics that will guide the design of SRSP mechanisms as part of contingency planning. It highlights that multiple metrics should be considered when formulating such strategies, including the degree to which the measures mitigate post-poverty poverty impacts, population coverage in flood-affected regions, coverage of the most vulnerable, total costs, and cost-effectiveness. Evaluating the SRSP mechanisms using multiple metrics not only provides a more comprehensive understanding but also highlights the trade-offs inherent in designing such programmes. Focusing solely on a single metric when making decisions may not

yield an optimal approach, as no single cash transfer design has proven to be the best across all metrics in the countries studied. This finding underscores the inherent trade-offs involved in selecting a specific SRSP measure, which will ultimately depend on each country's priorities and the fiscal space available for an SRSP response. Engaging policymakers in these discussions as part of preparedness planning is vital. Identifying and prioritizing the most relevant metrics ensures that contingency plans are well-aligned with national objectives and can be implemented effectively when emergencies arise.

When considering total costs, certain scenarios may appear more favourable due to their budgetary implications. However, it is essential to recognize that the cash transfer scenarios presented in this report are designed as temporary, post-shock measures aligned with SRSP goals, rather than as sustained budgetary increases. By proactively addressing these considerations, countries can develop robust, context-specific SRSP mechanisms that balance fiscal realities with the need to provide timely and effective support to vulnerable populations. It should also be noted that the modelling does not include operational costs – as such, each scenario should be understood also in relation to its operational feasibility and possible associated costs/ investments which might then make it more/ less desirable (i.e. the return on investments in having a single registry with high coverage).

Figure 41 Pre-arranged finance from international sources as part of overall financing flows in 2022



Source: Plichta and Poole, 2024, Centre for Disaster Protection

Analysis of Pre-arranged financing for SRSP

A key part of establishing and institutionalising SRSP is agreeing how it will be financed, for different risks and at different levels of severity. There are a number of reasons why it is preferable to arrange the finance for SRSP in advance, in particular to improve the predictability, adequacy and speed of finance. However, across all the case study countries there

is a reliance on ex-post instruments to pay for disaster response, which are typically unreliable and slow. There is therefore significant potential to expand the use of pre-arranged financing in the three countries and potentially link it to SRSP. There is a clear gap in relation to financial protection for medium to large scale disasters.

Each country has previously scaled up social protection for covariate shocks on an ad hoc basis, including using cash transfers. The

Covid-19 pandemic provided an opportunity for large scale SRSP across all the countries, although there is less experience with using SRSP for climate-related shocks. Large-scale SRSP has only been financed using post-disaster financing instruments, mainly with resources from international donors. For Covid, in Azerbaijan the cash transfers were paid for from a Special Fund created from budget reallocations. In Tajikistan and BiH, large-scale use of SRSP has been exclusively funded by international donors, including the World Bank, Asian Development Bank and the European Union. None of the case study countries have pre-arranged financial instruments in place to enable rapid scale up of social protection for covariate shocks.

For smaller scale disasters, each country has some form of established fund or contingency budget available that can provide limited funding for disaster response. Reserve funds and contingency budgets are normally relatively straightforward to set up, especially when compared with other financing instruments, and they can provide quick and reliable finance. The budgetary instruments in place that pay for disaster response in the case study countries could be explicitly linked with social protection in order to provide more reliable and quicker finance for SRSP. A longer-term endeavour could be to establish separate reserve funds for SRSP in the case study countries.

Contingent credit lines are loans for emergencies that offer very quick liquidity to governments, once pre-agreed trigger conditions are met. Lending instruments such as contingent credit are under-explored as ways of financing disaster response or SRSP in the region, although one is under discussion in Tajikistan. The availability of contingent credit to finance SRSP depends on a number of factors. Linking contingent credit with SRSP is a nascent topic globally as these

instruments often release money as general budget support.

Insurance for climate risks has been growing over the last 20 years and there is experimentation in some countries with using payouts for SRSP. Insurance for climate shocks is under-explored and generally not well-understood in the case study countries. Insurance could be a suitable financial instrument to fill the current gap in finance for large disasters across the case study countries, if availability, finance and capacity building support is provided. However, it seems likely that it is a longer-term option to pursue in the region as a way of financing SRSP.

Globally, most countries that have made progress with pre-arranging finance for SRSP, have done so with funding from international donors or multi-lateral organisations, like the World Bank. However, Central Asia and Europe are not priority regions for most international donors, which limits the availability of pre-arranged donor finance for SRSP. All the countries have received funds from external sources in the past that were channelled into SRSP, even if it was not arranged before the shock, therefore they could work to smooth processes for receiving such funding and efficiently channelling it into SRSP in future.

Pre-arranging finance, and using it for SRSP, requires consideration of public financial management (PFM) systems and processes. Overall, weak PFM can act as a barrier to the availability of pre-arranged finance and PFM legislation would likely need to be amended in most countries to facilitate pre-arranged finance. Decentralised governance models shape PFM and affect the ease of channelling funds to SRSP and budgeting processes need to further develop to facilitate transparency and expenditure tracking for SRSP.

Main Takeaways and Potential Implications

Natural hazards lead to increases in poverty and poorer households are more vulnerable to the effects of them. When a flood strikes and no SRSP measure is in place, the cost of inaction can be substantial, reflected through the profound impact on post-shock poverty levels among affected populations. Without adequate support, households face a significant risk of falling deeper into poverty and vulnerability. Cash transfer programmes are effective in mitigating the poverty increasing impact of the floods and have varying implications based on their target population and transfer size. The simulation model and the associated interactive tools provides policy makers with insights into how different social protection responses can address disaster-induced poverty, potential trade-offs and consequences of different design options.

The simulation models, the emerging findings and the prepared interactive tools help to support and improve emergency preparedness and contingency planning. Given the importance of reaching agreements on potential responses before a shock occurs, the simulation aims to facilitate these discussions through providing evidence. The evidence-based approach presented in the report along with the interactive tools are not designed for prescriptive policy making, but rather to equip policy makers to make informed decisions in their planning efforts for SRSP measures – looking at what the trade-offs for their contingency plans may be - that address immediate disaster impacts while fostering long-term resilience in social protection systems.

The global context is heavily skewed to post-disaster financing – in comparison, very little pre-arranged finance is available via the international system to pay for the impacts of disasters. The three country case studies reflect this global reality as there were gaps in all types of

pre-arranged financing instruments across the case study countries. Given that pre-arranged finance is itself an emerging field, it is not surprising that there are not yet clear examples of pre-arranged financing instruments being linked to SRSP in the three countries. There is therefore much space for increasing the understanding of and use of pre-arranged finance in general, as well as specifically for SRSP.

Overarching recommendations from the cross-country analysis are as follows:

- Building on the findings presented, alongside the interactive tool and other available resources, it is vital for policymakers to proactively plan for disasters through SRSP measures. This includes developing a contingency plan to ensure a rapid and effective cash transfer response post-disaster, considering the substantial costs associated with inaction.
- Evaluating the SRSP mechanisms using multiple metrics not only provides a more comprehensive understanding but also highlights the trade-offs inherent in designing such programmes. It is important to have a holistic approach and consider and agree on the metrics that will be used when designing SRSP mechanisms.
- While various cash transfer mechanisms may be considered, it is essential to evaluate the operational feasibility (and required operational investments) of the selected SRSP mechanism, to ensure sufficient preparedness leading to an effective and timely response.
- Expanding and leveraging existing social assistance systems for targeted cash transfers can minimize administrative costs and enhance cost-effectiveness in disaster response, as these programmes that these systems serve are often reaching households with categories that make them most vulnerable to shocks.

- Allocating sufficient resources for high-coverage scenarios will be necessary during severe disasters to mitigate post-shock poverty impacts comprehensively, particularly for vulnerable groups like children.
- There is a need to build understanding across all the countries on both pre-arranged finance and SRSP.
- As a shorter-term measure, it may be possible to adapt general budgetary instruments that are already in place for funding disaster response so they can provide reliable and quicker finance for SRSP.
- Over the medium-term, establishing specific funds or contingency budgets for SRSP may provide a more reliable source of finance for smaller, more frequent disasters.
- The clearest gaps in pre-arranged finance across the three countries are for disasters with medium to severe impacts. Countries therefore need to urgently investigate options for filling these gaps, for example, investigating contingent credit or market-based instruments like insurance.
- Given the lack of donor engagement in the three countries, attracting pre-arranged donor finance is not a priority.
- Pre-arranging finance for SRSP will require consideration of PFM processes and systems as well as legislative considerations.

Acknowledgements

This report, *“Developing Costed Contingency Actions and Undertaking an Analysis of Pre-arranged Financing for Shock-Responsive Social Protection: A Focus on Azerbaijan, Bosnia and Herzegovina, and Tajikistan,”* was prepared by Development Analytics on behalf of UNICEF Europe and Central Asia Regional Office (ECARO). The team included Nazli Aktakke, Zoe Scott, Hazal Oz, Mehveş Demirer, Owen Scott, Ozge Kaptan, and Aybike Sahinoglu. The project was led by Diana King (Social Policy Specialist, UNICEF ECARO), with substantive contributions and guidance from Rashad Huseynov and Sharlene Ramkissoon (UNICEF Azerbaijan), Irina Kulenovic (UNICEF Bosnia and Herzegovina), and Nangar Soomro, Azizakhon Kataeva, and Zamira Komilova (UNICEF Tajikistan).

Published by UNICEF Europe and Central Asia Regional Office

UNICEF Europe and Central Asia Regional Office
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